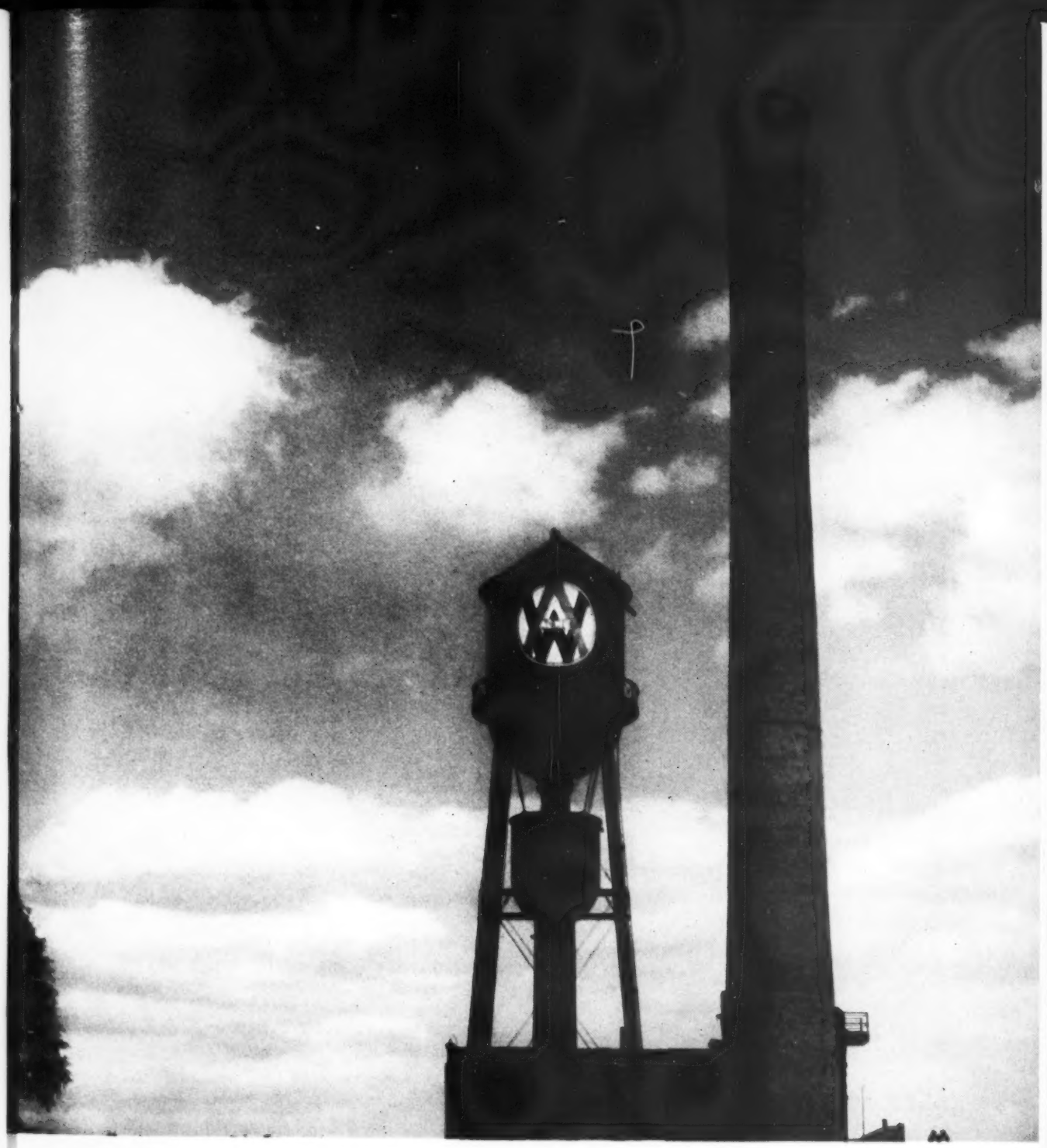

Connecticut INDUSTRY

MARCH 1955

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MANUFACTURERS' ASSOCIATION OF CONNECTICUT, INC.

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L. M. BINGHAM, *Editor*

IN THIS ISSUE

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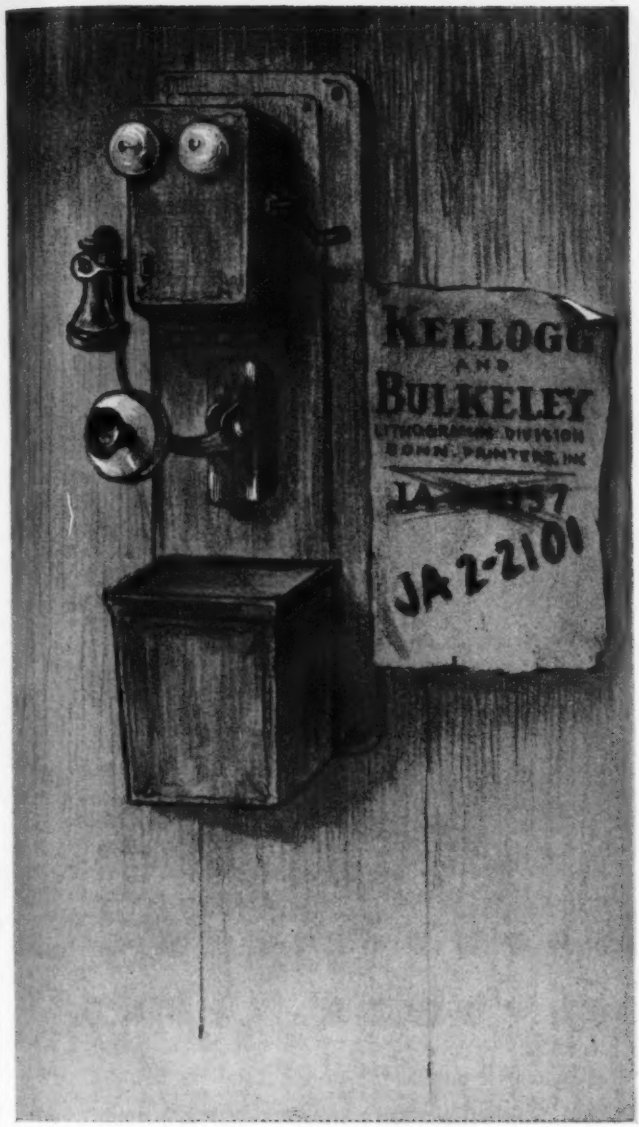

An old friend,

with a new number...

Actually, it is not a new number; the number is one that has been used for years by another old friend, Case, Lockwood and Brainard.

With the issuing of the forthcoming telephone directory, the only number you need remember when you want quality printing, whether it be letterpress or lithography, is JA 2-2101.

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become POWER-LINES

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T. A. D. JONES SERVICE — whether by truck, rail or barge — is as handy and round-the-clock and dependable as your 'phone, and almost as instantaneous. It serves all of Connecticut and Western Massachusetts, from one of the largest New England reservoirs of Bunker "C" fuel oil, bituminous and anthracite coal.

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UNiversity 5-6103 — (Day and Night) EDison 3-3123

After hours: HObart 7-2533 for coal, HObart 7-0766 for Oil.

INDUSTRIAL COMMUNITY RELATIONS

By DeHAVEN ROSS, *Treasurer*

Homelite Corporation, East Port Chester, Conn.

DURING the past twenty-five years there has been a continual change in the attitude of industrial management toward the community. Our modern "enlightened management" has a new conception of the responsibility of an industrial firm towards the community. However, this new thinking must be spread and fostered to have the proper effect.

For example, Greenwich, Connecticut has for years been a highly residential community. Its nearness to New York City, plus the favorable tax laws of the State of Connecticut, has attracted many persons, and the beautiful back country ridges running down to Long Island Sound has quite properly become an area of fine homes and estates. Therefore the town has become highly residential in character and many taxpayers have been definitely opposed to having any industry in the community. The few manufacturing concerns that have grown up in the town have secured sites near the town borders and have largely remained by sufferance.

But with the changing Federal tax laws and the increase in population, Greenwich has undergone a change. The large estates that formerly paid a major proportion of the taxes but that required a minimum of town services are being broken up into smaller plots. The smaller plots require an increasing amount of road maintenance, fire protection, police protection, school facilities, and other town services and result in an ever-increasing tax rate.

A study recently released by the Town Plan Commission of Greenwich reveals that industry gives to the town more tax dollars than are spent by the town on industrial property. In other words, industry produces a tax dollar surplus to the community. More study will be required to accurately appraise the possible advantage but the mere fact that industry pays its way in Greenwich is startling. What is true in Greenwich may be true in other communities. Industry, as such, may lose its condemnation and could be an obvious replacement for the big estates as a means of both producing economic wealth to the community and helping to reduce the tax rate.

To a large extent the progress of this new thinking will rest with industry itself. Profit as such is not only commendable but necessary to the continued existence and growth of the enterprise; but profit as such must not become an obsession to the extent that management and stockholders forget their responsibility to the community. Most stockholders are also citizens and this dual relationship must be understood.

Much has been said about the acceptability of so-called "light industry". Without any exact definition, it would appear that certain types of industry have become sufficiently desirable to be sought by some communities. If this is so, it may be that towns who have hitherto frowned on industry might better have another look. Connecticut has the highest manufacturing income per capita of any state in the country. Connecticut workers receive a higher average hourly rate than the national average. Its area is small as compared to states in general but its way of life has been largely dependent upon machinery and products. With this history plus the facts as shown in the Town of Greenwich Planning Committee report, industry has a marvelous opportunity to be acceptable provided a genuine desire exists on the part of both property owners and industry to probe the future for their mutual gain. To me it seems that the atmosphere was never more conducive to this idea.

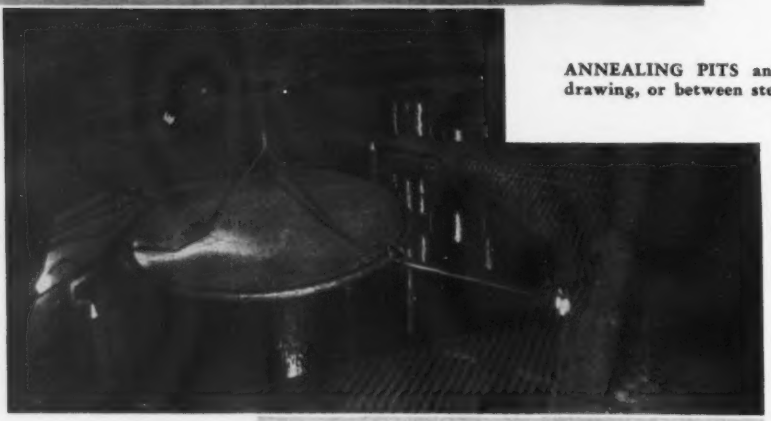
At the turn of the century a manufacturing plant was built chiefly for its functional job and little thought was given to beauty and community acceptability. Seldom was a lawn, shrubs or tree considered as necessary or desirable. Quite naturally laws came into existence which restricted industrial growth. Zoning was created for the economic good. But with the last World War and the tremendous quantity of material which was produced, persons became temporarily employed in factories from other walks of life so that the factory is better understood by people in general than was the case prior to 1941. Also many plants have been constructed where lawns and parking areas have provided space and beauty. Many factories are as beautiful as public buildings. Industry need no longer be the blight which was considered necessary many years ago.

The purpose of this article is to call to the attention of thinking persons the changes which have taken place, with the hope that both industry and the community may better understand their mutual problem, and that a genuine desire may be awakened to appreciate what industry can do to improve community life while reducing individual tax rates. Progress along this line will result to the common good.

In certain sections of our country, attractive inducements are made to entice industry to settle in their communities. Possibly not everyone appreciates that this inducement can go so far as to give the company a free site, a paved road leading to the plant and extend water and sewer lines at the community's expense. The time to cultivate and understand the needs of a growing company is while it is still located in Connecticut, not after the management has made preparations to move to localities where the above inducements are offered. Our local citizens should understand and appreciate the seriousness of this problem.

The writer of this month's editorial is a director at large of MAC. After graduation from Harvard University Mr. Ross started his business career with Liberty Electric Co. of Stamford as timekeeper in 1924, going with Homelite Corporation in 1929 two years after Liberty was sold to Acoustic Products Manufacturing Company. Besides his present business activity Mr. Ross serves as vice commodore of the Stamford Yacht Club, treasurer of Stamford-Greenwich Manufacturers Council; director, First Federal Savings and Loan Association of Greenwich; and trustee of Emerson College, Boston.

SPOOLS of Acme magnet wire are shown on the left. Above is a typical electrical coil winding.



ANNEALING PITS and drum for annealing copper wire after drawing, or between steps in drawing.

AN ACME MOLD COIL for use in a transformer.

FINE WIRE DRAWING machines at the Acme plant.

FIFTY years ago, in 1904—the year The Acme Wire Company was organized—electricity was a little-understood and little-used giant. It was pretty much of a mystery. Life seemed simple in those days by comparison. A bicycle was something of a luxury. There was no television or radar. Automobiles were rare and an uncertain curiosity.

Those were the days of taffy-pulls and of high buttoned shoes. Bathtubs were largely an unrealized dream. Water for the Saturday night bath came from the rain barrel. Four to six dollars a week was pretty good pay for six long days of work; however, things were cheaper too. Eggs were only ten or twelve cents a dozen. You could get a good restaurant dinner for twenty cents. Strawberries were a nickel a quart. Haircuts were only fifteen cents.

Those were the days when our present great electrical industry was in its infancy. Steam engines and water wheels were the main source of power. Telephones were quite common, especially in our area, thanks to the inau-

THE ACME WIRE COMPANY

Fifty Electrifying Years

1904 — 1954

The Acme Wire Company has four main lines of products, in most of which the Company is a pioneer manufacturer. These products are distributed nationally and for export and are as follows: Magnet Wire, Coils Wound with Magnet Wire, Varnished Electrical Insulations, Electrical Insulating Varnishes and Compounds.

These products are used as basic semi-finished raw materials by the manufacturers of nearly every sort of an electrical device.

The heart of practically every kind of electrical equipment is a coil of magnet wire wound around an iron core and properly insulated. The four lines of Acme products are the essential elements required.

guration of the first telephone switchboard in New Haven. Electric motors were being tried out where electric power was available.

There were many dreamers in the electrical industry. There were many doers who were turning their dreams into practical applications for electricity—such as Mr. Charles F. Kettering who was developing the electric starter for the automobile, in the manufacture of which The Acme Wire Company took an important part.

It was in such an early era of promise of what was to become our present great electrical industry, that The Acme Wire Company had its beginning fifty years ago—in the atmosphere in which Eli Whitney, inventor of the cotton gin and first to use standardized parts in mass production, did some of his most important work.

From a small beginning the Company has grown and prospered. Today it supplies at least a portion of the requirements of practically all of the electrical manufacturers.

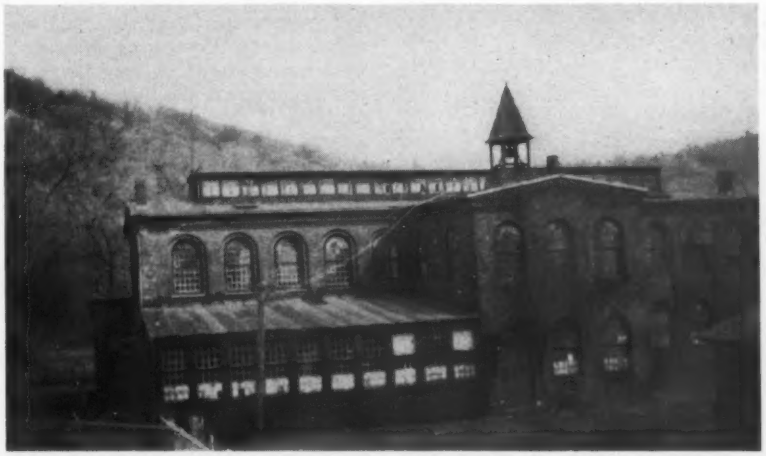
Acme Starts Business

In 1904 the demand for magnet wire, while not yet great, was growing. Power companies and trolley lines for the most part operated on direct current and their requirements were for coarse sizes of cotton covered wire. The expansion of the electrical industry with its need for fractional horsepower motors, ignition coils, transformers, electronic, radio and television coils and many others requiring finer sizes of magnet wire was still to come.

There was one substantial demand for the finer sizes of magnet wire even in 1904, and that was for ringer coils for telephones. The telephone industry was reaching out and expanding enormously. Victor M. Tyler was then Secretary of the Southern New England Telephone Company and he recognized the possibilities of the insulated wire business. When the opportunity came to him to finance the building of some newly designed insulating machines, he grasped it and started to organize a company. One of the first men whose services he secured was Edgar L. Hartpence, who had practical sales knowledge in magnet wire. These two men were principally responsible for giving The Acme Wire Company its start.

For a factory, the Company rented from the New Haven Water Company the old Whitney Arms Company plant located just below the Lake Whitney dam. Cotton and silk insulating machines were installed and the Company was in business. During the balance of 1904 between $11,000 and $12,000 of sales were made at a loss of about $8,000. The second year, however, operations were in the black and the long period of expansion of sales and profits was under way. One of the first of a long line of developments which meant much to the Company was the commercial introduction of enameled copper wire to the electrical industry. Acme designed and built its own wire enameling machines and was an early pioneer in the application and sale of enameled wire. For most fine wire windings enameled wire proved superior to and was supplanting the use of plain silk and cotton insulated wire.

Another important addition to



OLD ELI WHITNEY arms plant building as it was in the period 1904 to 1914 when it housed the Acme Wire Co.

Acme's line of products was made when it was decided to undertake the production of coil windings. The use of a substantial number of patented multiple coil winding machines was offered to the Company under a license agreement which had about a dozen years to run. A large volume of business was done under this license. It was a profitable one not only for the Company but for the owners of the patents. The latter had come to rely on the royalty payments from Acme to such an extent during the years that the license was in force, that they made a great effort to have the life of the patents and the license extended after the expiration of some of the basic patent claims. Many conferences were held but with inconclusive results. The license agreement was a long and complicated one, and the Company secured a legal opinion on it from Henry L. Stimson (who later became Secretary of War in President Franklin D. Roosevelt's cabinet) and fortified with this opinion, Acme was able to negotiate a satisfactory settlement under which all royalty payments ceased and Acme purchased title to the winding machinery.

In the ten years from its founding, the Company had completely outgrown its rented quarters. A fine factory site in Hamden, a suburb of New Haven, was acquired consisting of about four acres of land near the junction of Dixwell and Putnam Avenues and bounded on the eastern side by tracks of the N.Y., N.H. & H.R.R. Co. which provided sidetrack facilities. An up-to-date concrete and brick plant was built and in 1914 all operations were moved into this new location.

Magnet wire and coil windings then were the chief products of the Company during its early years. To make sure of a good source of supply and to improve its manufacturing and costs, the Company found it advisable to install wire drawing equipment and this constituted a major early addition to its plant production facilities.

The tremendous growth of the electrical industry with its development of electrical devices of all sorts and their demand for semi-finished raw materials has led the Company to expand its lines of products from time to time. In 1921 the production of varnished electrical insulations including cable tape and other related items was begun and these are, today, an important line of Acme products supplied widely to the electrical industry.

THOMAS G. NEE
Chairman

HERBERT B. BASSETT
President

For many years Acme has had its own plant for the production of electrical insulating varnishes, enamels and compounds. Originally, only materials for the Company's own needs were manufactured. A long range research program leading to better methods of insulation in its lines of magnet wire, coil windings and electrical insulations developed a superior line of thermosetting compounds which were used first in World War II. At that time the high tension harnesses of the engines of all carrier-based planes were filled with this new compound. There were many other war applications. These led to the development of ACME-MOLD coils, completely impregnated and encapsulated coil windings of which many millions are in use today. Acme also produces a complete line of electrical insulating varnishes for the electrical industry.

During both World Wars I and II and since, Acme products have taken important parts in the operation of planes, ships, tanks, radio and in all other types of electrically operated or controlled defense equipment.

The first stockholders' meeting was held June 8, 1904 and Victor M. Tyler, Edgar L. Hartpence and Herbert E. Flather were elected directors. Mr. Tyler became President on March 1, 1905, and Mr. Hartpence was made Vice-President. Three years later, May 5, 1908, Mr. James E. Wheeler became Secretary and this slate of officers remained throughout the early years of the Company.

Mr. Victor M. Tyler retired as President on April 13, 1928 and the Company was fortunate in securing the services of Mr. Thomas G. Nee to fill that office. His conservative but yet progressive policies guided the Company successfully through the depression of the 1930's, through World War II, and laid the foundation for the Company's success and expansion it has since achieved. In 1948 Mr. Nee became Chairman of the Board and was succeeded in the Presidency by Herbert B. Bassett who continues the sound policies of his predecessor.

The Company has been extremely fortunate also in two other particulars —in its Board of Directors and in its Employees.

Those comprising the Board of Directors have been an outstanding group, many of whom have rendered service of a nature far exceeding that which Directors are ordinarily called upon to give, and the Company feels a sense of obligation to them. The Employees of The Acme Wire Company are the one greatest factor in its success. They constitute an organization of fine people who have given energetic and loyal service over the years. In partial recognition of this, the Company provided in 1942 Group Life, Accident and Health Insurance covering sickness and accidents not connected with employment; and effective January 1, 1953 inaugurated a Pension and Retirement Plan, the cost of both of these being borne by the Company. Good employee relations have been maintained at all times.

Products

MAGNET WIRE. Acme's chief product is insulated round solid copper magnet wire which is distributed to the manufacturers of electric motors, generators, transformers and practically all other types of electrical equip-

ment. A coil of magnet wire, when connected to an electric current, generates a magnetic field and acts as a magnet. It is this magnetic force which causes motors to rotate and which actuates generators, transformers and other electrically operated devices.

Fifty years ago, methods of manufacturing magnet wire were a far cry from what they are today. The electrical industry was starting a rapid growth at that time, providing a good market. The young telephone and automobile industries required magnet wire for the various coil windings then needed to operate a telephone system or a car. Yet, many of the high quality materials and improved equipment used today in making magnet wire were not available. In its early years Acme made many automotive ignition, or spark, coils with bare copper wire. A thread of heavy cotton was wound between turns to provide insulation. On occasions the turns of bare copper wire were coated with varnish for insulation. Copper wire insulated with wrappings of cotton or silk yarn was in general use for winding relay and ringer coils for telegraph and telephone use. There was much to be desired in these materials and methods but they were the best available at the time.

In 1906, after considerable experimenting, Acme succeeded in commercially producing a magnet wire with an enamel baked on the copper conductor. Acme is reported to be the first to make a magnet wire in this manner and supply it commercially to the electrical manufacturers. The development of enameled wire was an important step forward because it made available a less expensive insulated wire than had been possible with cotton or silk insulation. This enameled wire had the advantage also of a much thinner insulation and one which could withstand higher electric voltages. The result was a smaller, less bulky, more efficient and lower cost coil winding. This enamel, however, was difficult to handle. It was made of a material similar to pitch and was quite brittle. It was easily attacked by the solvents or thinners of varnishes which were used to treat coil windings for protection against moisture and other elements that would affect their operation. Further improvements were necessary. Important progress was made in the use of enamels made from drying oils, such as linseed oil, and natural gums and resins. Known as oleo-resinous enamels, they had better flexibility and toughness and were much more easily handled. As time went on, synthetically produced resins and higher quality drying oils, such as Chinawood oil, were used to obtain even better flexibility, toughness, uniformity and resistance to varnish thinners. Although improved beyond recognition from the early product, plain enameled wire which is produced with an oleo-resinous enamel is still a most important material and is used widely by electrical manufacturers in the production of electrical equipment.

Keeping In Step With Developments

Over the years great changes have been made in the design of electric motors, generators, transformers, controllers and the many other electrical devices. There have been almost countless new applications, particularly in the broad field of electronics, radio and television. The emphasis has been upon lower cost, lighter weight, smaller size, increased efficiency. The realization of much of these improvements and developments in the design of electrical equipment has been possible because of the great advancements in the art of making magnet wire in which Acme has been a proud participant. While the present plain, or oleo-resinous, enameled wire is still the answer to a broad field of applications, it will not meet the operating temperatures and abrasion requirements of many of the modern motors and other devices. A wrap of cotton over enameled wire still gives the highest quality of result in many motors when the winding is properly treated with varnish and the operating temperatures are not too high.

Late in the 1930's completely synthetic wire enamel became available. These materials had extreme flexibility, hardness, toughness and resistance to the action of heat and varnish thinners. They met with widespread approval by the manufacturers of electrical equipment and Acme adopted their use. One of these insulations, sold by Acme under the trade name "Formvar," is known as a vinylacetal resin and is somewhat similar to the vinyl plastics which we hear about so much today. Another is Nylon. The same basic material used for making nylon clothing is coated on wire from a solution of nylon. Some customers prefer a composite coating of Formvar over Nylon, for which Acme's trade name is "Nyvar."

During World War II, when silk was unavailable, nylon textile yarn was substituted. This proved to be most acceptable as a wire insulation and substantial quantities of this type of wire are being made by Acme. A few years ago the "Miracle Fibre" Orlon appeared on the market and Acme was the first to use this new material as a covering for magnet wire.

Today's mode of living would be impossible without magnet wire, for it is present in every motor, transformer or coil winding that drives or actuates the many appliances and devices that we depend upon daily in our homes, at work and in our travels. Magnet wire is a basic product. The quality of Acme magnet wire and the service rendered to its customers by its production and sales organization are such that the company supplies at least a portion of the magnet wire used by most of the electrical manufacturers in the country.

COIL WINDINGS. A large amount of Acme's magnet wire is used in the Acme Coil Winding Division. Here wire is wound into coils on paper cores or bobbins. Coils wound with magnet wire are supplied in volume to the electrical manufacturers who assemble them into their equipment. The number of coil windings used in this country yearly runs into the millions. There are hundreds of different types and Acme custom builds each to the individual customer's specific requirements.

Early coil windings were comparatively crude, as has been stated, but marked improvements in methods and design were soon made. This was well demonstrated by the fact that Acme coils played an important role in the development and production of the electric self-starter. Acme engineers worked with the famous inventor, Mr. Charles Kettering, on this revolutionary device and for several years thereafter Acme shipped many thousands of field coils for self-starter motors.

Through the experience gained in the volume production of many different types of coils, Acme was prepared at the start of World War I and II to render valuable assistance to this country's defense program. Special high quality magneto coils were supplied during World War II for aircraft engines powering the famous P-47 Thunderbolt and P-51 Mustang

(Continued on page 38)

WELL OVER four million crop gathering boxes have been preserved with Cellu-san.

Birthday for Cellu-san

A NEW Connecticut product called Cellu-san designed to improve the efficiency of the nation's food harvesting operations, is celebrating its first birthday in Simsbury. Cellu-san, a water repellent wood preservative is produced by Darworth Incorporated, a wholly owned subsidiary of the Ensign-Bickford Company.

First introduced to the market in 1951 by Nuodex Products Company, the product was purchased by Darworth late in 1953. Today Cellu-san is still the first and only wood preservative made expressly for use by the food industry. Its original development was primarily a response to an ever-increasing demand by food growers for a safe method of preserving and protecting field boxes and baskets used to harvest produce.

The requisites for any satisfactory treatment of wood carriers and containers used for foodstuffs are that it be non-toxic, odorless, colorless and inexpensive. Ease of handling and application must be considered, too, from the standpoint of labor costs. And unless a treatment is relatively permanent, it cannot withstand the humid conditions and other weathering effects to which it is constantly subjected.

The effectiveness of this preservative lies within its two basic chemical components. One, a fungicide, prevents rot by keeping wood free of mold, mildew and decay. The other, a water repellent, minimizes shrinkage and swelling . . . contributing factors to loosened nails, wood brittleness and breakage. In addition to the protective and strengthening characteristics of these chemicals, tare weights of treated containers are stabilized by controlled moisture absorption of the wood. This produces an additional savings since the canner, during weighing operations, pays only for the weight of the produce and not for extra pounds of water absorbed by the box.

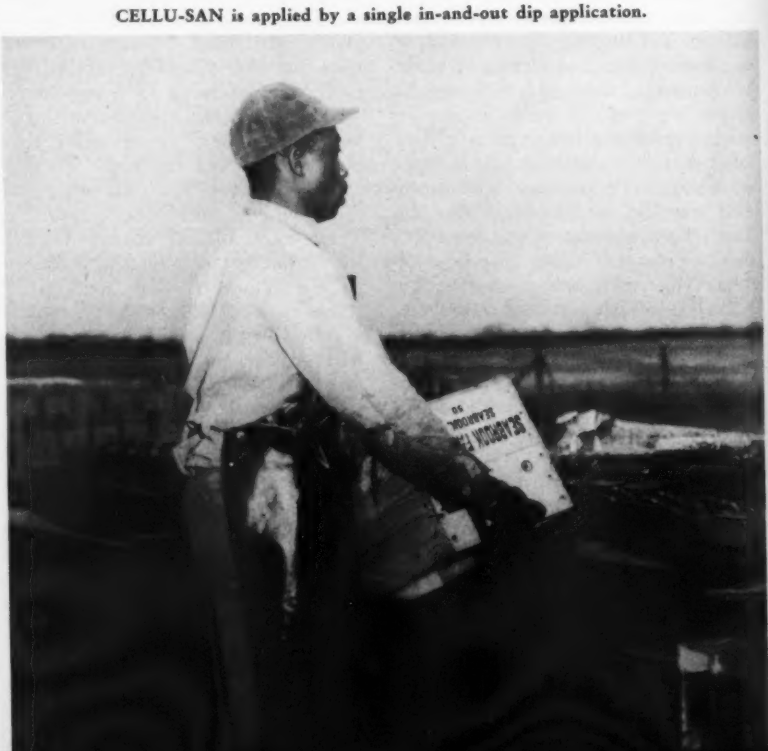
Extensive Testing Program

The new preservative was tested by independent laboratories whose reports stated that Cellu-san treated boxes withstood the fatigue of shocks and handling to a much greater degree, and were far more efficient mechanical-wise than the untreated boxes. Nail-holding power, alone, was increased well over 100%, indicating that a much longer service life could be expected from treated containers. Toxi-

(Continued on page 47)

FREDERICK D. HOUGHTON

CELLU-SAN is applied by a single in-and-out dip application.



The Connecticut "White House" Conference

By DR. RAYMOND F. FAY, Bureau Chief
Bureau of Certification and Public Understanding
State Department of Education

THE scene was the Governor's office. The time was late in the morning of April 21, 1954. The Governor was in conference with the President of the Connecticut Council on Education, the State Commissioner of Education and his Deputy. Under discussion was the plan suggested by President Eisenhower for each state to hold a conference on current major educational problems prior to a "White House" Conference in 1955. As yet the official request of the President to the Governor had not been made, but the press had carried a considerable amount of information about the project.

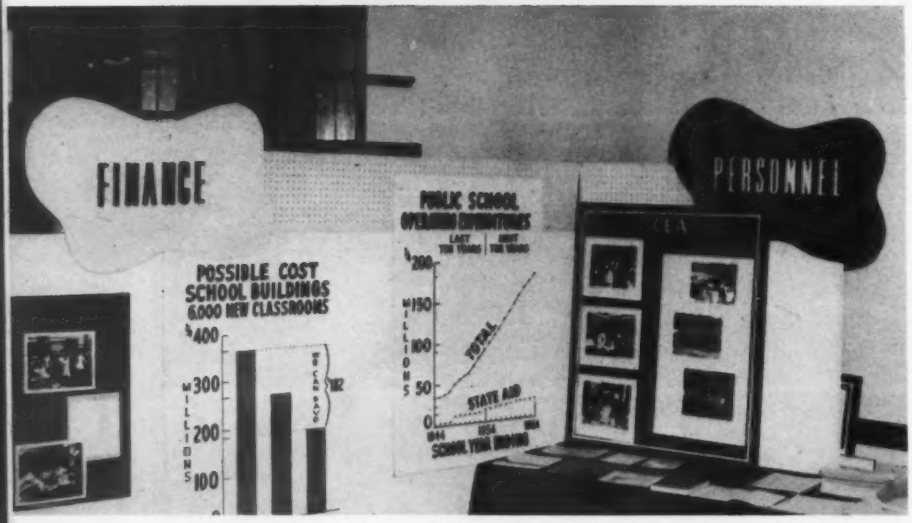
The education representatives explained that for several years Connecticut had had an annual citizens conference on education sponsored by the Council on Education, composed of representatives of 34 statewide lay and professional organizations, and by the State Department of Education. They expressed the hope that duplicate conferences would not occur in Connecticut as a result of the President's plan and suggested that one way to avoid such a situation would be for the Governor, the Council and the Department to sponsor jointly a Seventh Annual Connecticut Conference on Education. This was readily agreed to by the Governor. Thus Connecticut's regular citizens conference became the vehicle for Connecticut's "White House" conference. Liaison with the Governor's office was provided for by one of his staff members who was assigned to the General Committee established to plan the conference.

A steering committee was formed of fifteen members representing twelve professional and non-professional organizations whose activities are statewide. At the first meeting of the committee, the working committees were authorized, and arrangements made for the appointment of members. A total of 75 persons representing 37 organizations served on the various committees.

In planning for the conference, invitation quotas were established and machinery was set in motion to invite a conference membership of between 300 and 500. An effort was made to have at least twice as many non-professional members as professional.

THE CONFERENCE was divided into discussion groups to consider various topics of importance to the conference.

SOME VITAL TOPICS slated for consideration at the "White House" conference were graphically treated in colorful displays.



The conference was held on two days—November 30 and December 1, 1954 at the Hotel Statler in Hartford. Three general meetings were held. The first opened the conference and was addressed by the U. S. Deputy Commissioner of Education and the Connecticut Commissioner of Education. The second was a luncheon addressed by the Dean of Women, University of Pennsylvania. The last, a dinner meeting, included a summary of the conference, an address by the Governor, and a closing inspirational address by the Chairman of the Board of Directors, Chamber of Commerce of the United States.

The participants came from 104 different towns and represented 56 different organizations in Connecticut. They came from rural communities, from industrial centers, and from commuting towns—at considerable expense in time and energy. The conference activities themselves are perhaps best briefly described by the following excerpts from "Highlights of the Conference" as presented by Dr. Rosemary Park, President of Connecticut College for Women, to the closing meeting of the conference.

"Our problems are problems of quality and quantity. We realize the phenomenal expansion of the areas of knowledge and the tremendous increase in the complexities of the world around us. We ask ourselves, 'Is our school program responsive to this situation? Is it adequate for all of our children? This is a qualitative problem, a perennial problem, which may be reduced to the simple question: What should be taught by whom?'

"We have in addition to such qualitative problems a growing number of quantitative problems which are relatively new for us. Where are we to get the teachers? Where are we to find buildings? Where are we to secure funds?"

As the conference was divided into smaller groups to discuss various aspects of these questions, it quickly became evident that all problems were so inter-related that no group could confine itself entirely to the topic set before it. "Each group also recognized that there could be no solution of the problems presented which did not involve consideration by professional educators and also by the non-professional educators, as we like to call all the rest of us."

Some Outcomes

Concerning the school program: "The school experience or the curriculum should be used as a tool to achieve the individual's development to the highest capacity for life in a democratic free society. Such development would best be based on knowledge of our cultural heritage. The whole educational process was con-

(Continued on page 55)

A Student Reports on N.A.M. Congress

By RENAULD J. PELLETIER

For the third consecutive year MAC has cooperated with N.A.M.'s Education Department in selecting a Junior Student from a Connecticut 4 year degree-granting college to attend the Congress of American Industry held at the Waldorf in New York in early December each year. Mr. Pelletier, a married ex-Marine who served in Korea and who now works part-time in a tool and die shop in his home town of Wallingford, was selected upon recommendation of the President and Dean of Quinnipiac College, New Haven, in which he is enrolled in the Junior class. Prior to his enrollment at Quinnipiac, he attended the Porter School of Machine Design in Hartford. He is now president of Phi Theta Kappa, the honorary society at his college and treasurer and chairman of the Education Committee, Lions Club, Wallingford.

In this brief report, Mr. Pelletier sets forth a few of his concepts of N.A.M. after attending its annual conference.

RENAULD J. PELLETIER

As a student and part—time employee, I often find myself donating too little time to following current affairs, and concentrating primarily on my studies and on my job. Perhaps this is the reason why I knew so little about The National Association of Manufacturers and its functions when I was informed of my selection as representative of the colleges in Connecticut. It often requires an experience such as I have recently had to arouse greater interest in current happenings and in the groups and individuals who influence these happenings.

Prior to attending the convention, the only knowledge I had concerning the National Association of Manufacturers was limited to the information derived from study in several business management courses I have taken at Quinnipiac College. Naturally, this source of information provides the student with a familiarization of groups like the N.A.M. and their functions, but it cannot come close in comparison with the personal contacts and exchange of viewpoints we as students experienced at the convention. While I was impressed by the sphere of activities participated in by the N.A.M., I was mostly impressed by the Education Department and by the work they are doing. This department is one branch of the association of which it can be justly proud. It was gratifying to learn that a group such as the N.A.M. has such a genuine interest, not only in education as a whole, but in the individual college and student. While at the convention, it was not uncommon for a student to be approached by a leading industrialist and asked specific questions concerning the student's college or of the student's viewpoints in regard to certain aspects of the platform presented at the convention by the N.A.M.

As a result of the type curriculum I am now enrolled in and of the experience I have had as an employee, I have developed a personal trend of thought with respect to industry and its problems. Although I did not agree completely with the platform brought out by the N.A.M., I can honestly say that the majority of what was said did follow my own philosophy regarding industry and its relationship in the economy. The same feeling seemed to hold true with the other students present. During the luncheons and dinners following the speeches, the students discussed the various topics presented in the preceding sessions and the consensus of opinion was in agreement with the point of view brought out by the speakers.

As I stated earlier, I am a part-time employee. I am employed as a machinist in a small tool and die shop in Wallingford. Because of this, I was very much interested in a talk given by Mr. John Diebold on the subject of "Automation". The developments he spoke of and those I learned of later concerning automatic machines certainly made present machines and methods appear out-dated. It can easily be seen that anyone who did not have a complete understanding of automation and its potentials might brand it as being the greatest evil of our time. We can feel certain that automation will be a major topic in labor-management relations to come. A great deal of study and planning must be devoted to the introduction of this new phase in technological advance before it can be presented to the public in a way that will be satisfactory to those affected by it. It is here that the Education Department could be most effective.

It often happens that people fear the thing they know least about. Before any plans are put into effect in any plant, it is imperative that every person employed by that industry be thoroughly familiar with the change to take place and what is to be done to compensate the workers who will find it necessary to be trained in other phases of their present jobs. To insure endorsement of automation by labor, management and the community, it is

(Continued on page 50)

The Development of The American Cotton Textile Industry

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This article represents a portion of Dr. Stelzer's doctorate thesis. It is presented in C I to give its readers an overall concept of the history of the textile industry of New England with its problems and trends. Dr. Stelzer holds A.B. and M.A. degrees from New York University and a Ph.D. from Cornell. He is currently an instructor in economics at the University of Connecticut. His special field is that pertaining to the relationship of government and business in a free enterprise economy.

THE cotton textile industry is one of the largest of American industries. In 1947 the value of cotton broad-woven goods shipped was $3,295 million, and that of cotton yarn $769 million, while thread mills shipped $154 million and narrow fabric mills $211 million worth of goods, respectively. In 1950 the industry provided employment for approximately half a million persons. Further, it is estimated that the investment in cotton manufacturing facilities approximates $5 billion.

This is an industry which has been characterized by conditions approaching those of pure competition—numerous small sellers, a standardized product, and free entry. Because of its important position in the economy, and because it approximates the purely competitive ideal, it should be fruitful to examine the history of the cotton textile industry with some care. Many of the problems of the industry—problems of integration and disintegration, location and relocation, boom and bust, technological growth and stagnation—can best be understood on the basis of its changing historical framework.

DR. IRWIN M. STELZER

Early Growth

The present-day cotton textile industry is the result of a process of uneven growth and development which began in 1790, the year in which Samuel Slater established the first successful cotton mill in the United States with machinery constructed from memory. Mills had been established in this country prior to that date, but all had failed after a short time. Thus the United Company of Philadelphia for Promoting American Manufactures, established by Trench Cox (Assistant Secretary to the Treasury and a disciple of Alexander Hamilton) in 1775 to manufacture cotton textiles, soon turned to the more profitable manufacture of woolen goods. Mills established by Hugh Orr in Bridgeport and John Cabot and Joshua Fisher in Beverly, Massachusetts, also met with failure. It is worthy of note that Slater's mill was equipped for spinning only, the spun yarn being distributed to families for weaving into cloth for their own use, or for sale.

The growth of the industry was painfully slow for several years, and by 1807 there were only 8,000 spindles in place in the entire country. In that year, however, came the first in a series of events which were to provide a tremendous stimulus to the American industry. The Embargo Act of 1807, followed in two years by the Non-Intercourse Act and finally by the War of 1812, meant that trade with England was virtually completely suspended. This interruption of commerce simultaneously removed many of the obstacles which had been standing in the way of the growth of a domestic textile industry. The South, now unable to sell its cotton to England, proceeded to flood the New England market with raw cotton, driving the price in that area down by over 50 percent. Furthermore, English cloth was now no longer available in the American market in any save minor amounts, and cloth prices rose from 17 to 75 cents per yard. Since the cost of manufacturing cotton cloth in the United States is estimated to have been about 30 cents per yard at this time, cotton textile manufacture suddenly became a highly profitable endeavor. In addition to these economic incentives, would-be manufacturers found that the shortage of cotton cloth made its production a patriotic as well as a profitable duty and that New England legislatures were granting generous charters to new textile concerns.

The interruption of foreign trade solved still another problem which plagued the industry—a dearth of capital. Many New England men who had accumulated wealth in foreign commerce sought new outlets for their energies and funds. This shift from commerce to textiles is picturesquely

described by M.D.C. Crawford as follows:

"To this rapidly spreading commerce, the embargo of Jefferson was a shrewd blow, to be rapidly followed by the War of 1812 which was the reaction from the envy of British shippers. After a gallant resistance, our little navy was either totally destroyed or sewed up in ports, and our merchant ships captured or rotting at the idle wharfs. The blow that might have crushed a lesser people, simply aroused the energy of New England, and turned her to manufacturing. And now the great idea of cotton production began to be taken up in serious interest."

Francis Cabot Lowell

One person who turned his energies from commerce to cotton was Francis Cabot Lowell, who became a cotton manufacturer when the international dispute cut short his career as an import merchant. Lowell, a Boston man, introduced the power loom to this country in 1814. His Boston Manufacturing Company, established at Waltham, Massachusetts, became the first mill in the world to spin yarn and weave cloth with power machinery in the same plant, i.e., to integrate two of the processes involved in textile manufacture. This company, with 3,000 spindles, was the largest in the country, as well as the first to be financed through the sale of common stock, the first to organize a separate textile machinery company, and the first to employ an independent selling house to distribute its products. This early separation of manufacturing and selling is particularly worth noting. The Boston Manufacturing Company at first tried to dispose of its output through an importing house, but was unsuccessful. It then turned to a Cornhill shop, the only establishment in the Boston area which would handle domestic cloth. Because of the stigma attached to "domestics," however, this shop found it impossible to sell even the modest output of the Waltham mill. Finally, the company consigned a shipment to B.C. Ward and Company, and the later disposed of it by auctioning it off at a price sufficient to give the manufacturer a satisfactory return and the selling house a satisfactory commission.

The success of this sale was not the only factor which led the Boston Manufacturing Company to continue consigning its product to B.C. Ward. Poor transportation facilities and sales over a wide geographic area made the extension of credit to wholesalers and retailers an absolute necessity, and mills were forced to sell their output on a three to nine months credit basis. Since raw material and labor costs had to be met as they were incurred, the mill found itself in constant need of working capital. The selling houses—first B.C. Ward and then others—filled this need by adopting the policy of making advances to the mills on the basis of goods consigned to them, thereby acting both as financiers and as the principal distributing agents for the mills. Thus the essentially non-integrated structure of the industry was developed, and the seeds of future controversy and dissatisfaction sown. The manner and extent to which merger was later to bring greater integration of manufacturing and selling is a story in itself—too complex to be briefly discussed here.

The Boston Company's success stimulated the growth of the industry. By 1815 there were 130,000 spindles in the United States, and by 1820, 220,000. As one observer (Albert S. Bolles) noted, "The building of cotton factories became one of the passions of the age. There was a great deal of idle capital in the country; and the success of Slater, Lowell, and others, stimulated its investment in this industry." The newcomers imitated many of the policies which the Lowell organization had proved successful. Thus, they integrated the spinning and weaving processes under one roof, and enlisted the services of independent selling houses. We have here an obvious example of Schumpeter's general principle that "the appearance of one or a few entrepreneurs facilitates the appearance of others, and these the ap-

THE MOST MODERN METHODS AND EQUIPMENT have contributed to the important strides made by the cotton textile industry in recent years in this country.

A RELATIVE SCARCITY of labor through the years put pressure on textile manufacturers to develop and introduce labor-saving equipment.

pearance of more, in ever increasing numbers."

The termination of hostilities with England brought with it the resumption of Anglo-American commercial relations. Great Britain, in an attempt to dispose of stocks of goods accumulated during the war, and at the same time to recapture the American market, flooded the United States with cotton goods at a price which American producers could not meet. Congress responded to a New England clamor for tariff protection by inserting in the Tariff Act of 1816 a 25 percent duty on cotton goods, and prosperity returned to the domestic cotton textile industry. Rapid expansion followed. The Boston Manufacturing Company, for one, soon found the power resources of the Charles River insufficient for its needs. It therefore acquired a new site on the Merrimac River, and there erected the mill town of Lowell. By 1850 this town was the most important cotton manufacturing center in the country. Other mills were established—both by the backers of the Boston Manufacturing Company and other entrepreneurs—in Maine, New Hampshire, and Massachusetts. These mills, all north of Boston, were built on the so-called "Lowell System," i.e., they were large-scale concerns, organized as joint stock companies by bankers rather than manufacturers, and designed for the mass production of highly standardized goods. Malcolm Keir's description of the Lowell System is one of the best:

> "The largest mills of the 'Lowell System' by 1850 contained generally 6,000 spindles, whereas mills elsewhere contained then as few as 300 spindles. These large mills of the Lowell System each manufactured just one commodity, for example osnaburgs, drills, print cloth or brown sheeting, 37 inches wide. If a company produced more than one item it manufactured each in one mill devoted exclusively to one commodity, that is, sheeting in one mill and drills in another. Some factories ran for years without a single change in the major adjustment of machinery or the slightest variation in their product. This saved one of the big costs of cotton manufacture, namely, alteration of machinery to make a different article."

The Lowell and Providence Systems

The Lowell System had the further advantage of allowing for division of labor to an extent great enough to permit operation of machinery at above-normal speeds. All in all, this method of operation proved highly profitable. Dividends ranged from 15 to 30 percent, even after a comfortable surplus had been set aside and after considerable expansion of facilities had been financed out of current earnings. The expansion of the New England mills south of Boston took a somewhat different form, with mills of that area following what has become known as the "Providence System." Mills in the latter category were owned and operated by individual proprietors who were, in most cases, skilled textile manufacturers rather than bankers. These plants were small, equipped with British-type machinery (due largely to the influence of Slater), and designed to turn out a variety of relatively high quality fabrics. Employers north of Boston relied chiefly on rather high quality female labor, while the Providence entrepreneurs early introduced English labor practices into their mills. This involved the wide-spread use of child labor, payment in kind, and many policies which can be classed as "paternalistic," in the worst sense of that word.

The characteristic common to both systems was rapid growth. By 1860 some 1091 mills were turning out 115 million dollars in cotton goods on about 5.2 million spindles. In doing so the industry was providing employment for some 122 thousand persons. Not only was there growth, but there was an increase in average mill size—from 1,500 spindles per establishment in 1831 to 4,900 in 1860—and in efficiency. While the number of employees in cotton mills just about doubled between 1831 and 1860, the number of spindles increased by four and a half times, and cotton consumption by five and a half times. The relatively high degree of efficiency which characterized American plants was noted by a highly competent contemporary observer sent from England to compare the relative efficiencies of American and British plants. " . . . it may, without fear of contradiction, be asserted, that the factories at Lowell produce a greater quantity of yarn and cloth from each spindle and loom (in a given time) than is produced in any other factories without exception in the world." Still another early observer stated that the American mills "are organized upon the most improved principles of the art and are supplied with the best machinery in the world."

Output per worker was, of course, increasing in mills throughout the world, but scattered evidence seems to indicate that progress was most rapid in this country. Thus, in 1860 the average number of looms per weaver was four in the United States and only two in England. The power loom had hardly come into use in France or Germany, and the hand loom, completely discarded here, was still in use in Great Britain.

The more rapid rate of introduction of textile machinery in the United States was just another example of the general phenomenon which had already become characteristic of this relatively high wage economy. A relative scarcity of labor and the resulting wage level put pressure on textile manufacturers to develop and introduce labor-saving equipment. This development would seem to bear out Rostow's statement that, "The appropriate general proposition concerning the composition of innovations seems to be that necessity is the mother of invention." In this instance the "necessity"—present in the United States but absent

elsewhere—was created by the pressure of growth upon a limited resource.

Despite its rapid growth in the pre-Civil War period the American industry did not approach the British in size. It has been estimated that the total number of spindles in England reached 21 million by 1850 and 30 million by 1861, as compared with 3.6 million and 5.2 million in this country on those dates. It was pointed out by contemporary observers that the American manufacturer was laboring under several disadvantages. "He pays higher wages. . . . His machinery is much dearer. . . . The interest of money and the profits of capital are considerably higher in the United States than in this country [England], which, of course, makes the price of goods higher. Owing to the climate, the raw material goes further in England, where some of the waste cotton can be spun." In addition, the American producer at this time found that he was at a decided disadvantage in the production of quality goods because of the greater experience of both British labor and capital. In the production of heavy drilling and sheeting, on the other hand, the Americans were on an approximately equal basis with their overseas competitors, as is shown by the fact that between 1830 and 1860 imports of plain cloth fell from $2.9 million to $1.2 million while our exports of that material rose less than $1 million to almost $4 million. The inferiority of America's fine goods and the equal stauts of its coarse goods was attested to by an English writer, who in 1835 reported:

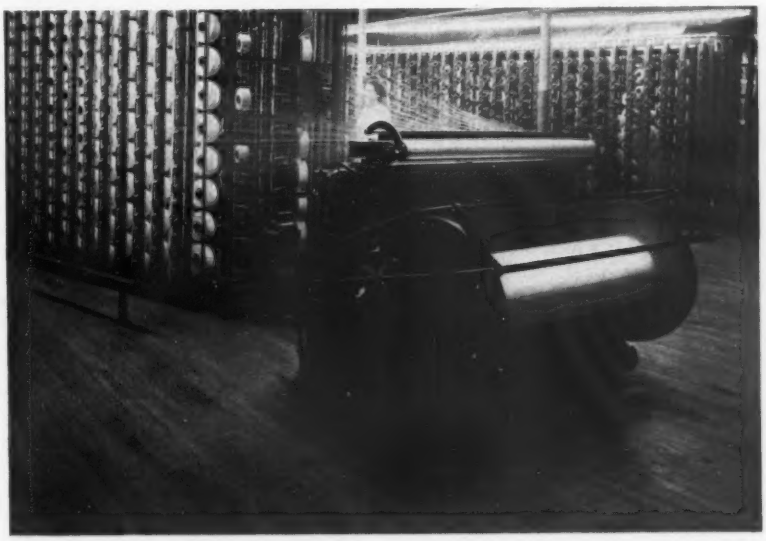
> "On the whole, it may be said that the Americans are capable of rivalling the English in coarse and stout manufacturers, in which large quantities of the raw material are used, especially in an article called 'domestic,' which they consume largely, and export to some extent; but that in all other kinds of goods, in all which require either fine spinning or hand-loom weaving, the English possess, and must long continue to possess, a very great superiority. . . . Our manufacturers have therefore little to fear from American competition."

The Impact of the Civil War and World War I

The growth of the industry was halted momentarily by the Civil War, which cut the cotton growing and cotton manufacturing regions off from one another. The "cotton famine" which developed in New England saw the price of raw cotton rise from 11 cents per pound to $1.67 per pound, a rise which led many mills to follow the example of the Merrimac Manufacturing Company. That organization, sharing the widespread belief in "peace in sixty days," shut down its mills and liquidated its cotton in the hope of making a large inventory profit on what appeared to be a temporary situation. The failure of a quick peace to materialize soon caused widespread shut-downs, and between 1861 and 1865 two-thirds of the spindles in the Lowell area remained idle. Many mills lost large sums experimenting with cotton imported from India, Egypt and Brazil.

Fortunately, the postwar recovery was a rapid one. Carried along on the wave of a general business boom, the cotton textile industry made rapid strides. By 1870 production of cotton manufactures was at an all-time peak. Although it experienced a slight setback during the panic of 1873, the industry continued its rapid growth, much to the amazement of most observers. "This extraordinary recuperation is one of the marvels of the age. It is an indication of the inherent vigor and vitality of the American people, which promises well for the future of our nationality." It is interesting to note that during the post-Civil War recovery the number of mills actually declined by about 25 percent. The number of spindles per establishment, however, rose from 4,766 in 1860 to 7,416 in 1870 and 14,153 in 1880. The number of employees per mill, cotton consumed per mill, and average value of product per mill also increased sharply. This increase in mill size continued steadily, and by 1914 the average mill had over 25 thousand spindles.

This increase in the scale of production heightened the mills' reliance on the selling houses, as each manufacturer found himself with a larger and larger quantity of goods to sell in increasingly complex and far-flung markets.



CONSTANTLY IMPROVING PRODUCTIVE EQUIPMENT, multi-shift operations and improved management techniques are important factors in the industry's increased output.

The growth thus far described received a further stimulus from the outbreak of the First World War, which brought large Government orders as well as high prices. The immediate postwar period saw demand continue at record-high levels, and when a Republican Congress added to this already bright picture in 1922 by increasing the low tariff established by the Democrats in 1913, profits soared. This boom, however, did not last. In 1923 the number of active cotton spindles reached its peak, and in 1924 earnings turned sharply downward. Thus, the cotton textile industry staged a private depression all its own long before American industry in general took to its bed in 1930. Because the industry did not participate in the 1925-1929 boom, (by the end

of the 1920's cotton manufacturing was listed with coal mining as a sick industry) the post-1929 events represented only a worsening of downward trends already evident in profits, prices and textile employment.

The New Deal

It is interesting at this point to briefly examine the New Deal anti-depression measures as they affected the cotton textile industry. On July 9, 1933, The Cotton Textile Code—the first approved under the National Industrial Recovery Act—was adopted. The code approved collective bargaining, limited hours of work to 40 per week, required that there be no reduction in weekly pay, limited mill operations to two shifts of 40 hours each, provided for the collection of statistics and accounting data, and prohibited installation of new machinery without permission of the National Recovery Administrator. The key provision, of course, was that which limited mills to 80 hours per week. This restriction worked strongly to the benefit of the Northern mills, which had earlier been forced onto a one shift basis by a lack of orders. Southern mills, which, until this time had been operating on a two shift, 110 hour week, had to reduce their operations sharply in order to comply with the N.I.R.A. code. When a brief flurry of prosperity brought a flood of new orders in 1933 (and the most profitable year the industry was to have between 1927 and 1936) New England mills were able to expand operations to a two shift basis while southern mills were being forced to contract output.

New Deal legislation also influenced the industry through its effect on costs. The Bankhead Cotton Control Act of 1934 in effect made the Agricultural Adjustment Act of the previous year compulsory. The amount of cotton that a farmer could raise was limited by the imposition of a prohibitive tax of 50 percent on ginnings in excess of the alloted quota. Those who refused to participate were given no allotment, and therefore had to pay a tax of 50 percent on all the cotton they sold. Production was sharply reduced and raw cotton prices rose, more than doubling between 1932 and 1934. It does not follow, however, that cotton manufacturers were adversely affected by this increase in raw material costs. The crop restriction program tended to keep cloth production at somewhat lower levels than it might otherwise have reached and this, combined with a recovery of demand, caused cloth prices to increase sufficiently to bring mill margins in 1934 to 43 percent above 1932 levels.

Other legislation passed under the New Deal regime tended to affect labor costs in textile manufacture. The National Industrial Recovery Act established a minimum wage of 30 cents per hour for southern textile labor and 32.5 cents per hour for northern labor. The Walsh-Healey Public Contracts Act of 1936 set minimum wages and maximum hours for firms manufacturing goods exceeding $10,000 in value for the federal government. The Fair Labor Standards Act, passed a few years later, had a greater effect on the low-wage textile industry than on other industries. Even more important was the passage of the National Labor Relations Act, which greatly aided both the United Textile Workers (A.F.L.) and the Textile Workers Union of America (C.I.O.) in their organizing efforts.

It is probable, however, that these measures did not lead to increases in unit labor costs. One set of estimates shows an actual *decline* in these costs during the thirties, indicating that higher rates of pay induced some increased efficiency of mill operation.

Thus, although the legislation previously referred to did force an increase in raw cotton prices, it cannot be said that on balance New Deal anti-depression measures proved detrimental to the cotton textile industry. The increase in the general level of industrial actvity and employment attributable at least in part to the overall effects of such moves rebounded to the benefit of the cotton textile industry. Thus per capita consumption of cotton rose from 21.14 pounds in 1930 to 21.53 in 1935 and 29.77 in 1940, and the level of productive operations in cotton textiles increased from 61.3 percent of capacity in 1935 to 96.2 percent in 1940. This improvement in the industry's condition was also reflected in the profit figures, which rose considerably during the period in which this legislation was in operation.

World War II

The outbreak of World War II brought with it a return of textile prosperity on a scale not seen for twenty years. Rising consumer incomes and large government orders increased the demand for textiles to peak levels. The fact that production reached a peak in 1942 and declined somewhat thereafter was due, not to a deficiency of demand, but to the fact that scarce labor was attracted to better-paying jobs in other industries. Nevertheless, cloth production in the 1941-1945 period exceeded the 1935-1939 level by 34 percent. Expansion was not of equal magnitude in all lines, of course. Mills shifted to products made of coarse and medium yarn like sheeting and osnaburgs (for bagging to replace imported burlap), cheesecloth and tobacco cloth (for bandages), netting (for jungle cloth), twills (for uniforms), denims and chambrays (for work clothes), duck (for tents), and narrow fabrics (for belting and straps). This shift in the nature of the industry's output resulted in a scarcity of finer consumer goods such as shirts, curtains, and sheets just at the time when rising incomes caused the demand for these products to soar. This situation served to build up a backlog of consumer demand which was to stand the industry in good stead when government orders fell off.

This high level of production was accompanied by a decline in the industry's productive equipment. The number of spindles in place declined by two million between 1939 and 1944, a decline of nine percent. To some extent this was due to the unavailability of machines to replace those wearing out, to some extent it was due to pessimism concerning post-war prospects, and to some extent it was merely the continuation of a pre-war trend. (The number of spindles had declined by 26 percent during the thirties). That this decline in physical facilities was associated with an increase in production was due to further extension of multi-shift operations and to improved management techniques, both of which made each unit of equipment capable of producing a larger output.

The increased level of demand and activity during the war brought with it an increase in margins and earnings. This high rate of profits was not only maintained, but increased, in the post-war period, and the industry was discharged from its sickbed. Declines in 1948-1949 and 1951-1952 proved to be short-run phenomena from which the industry quickly recovered. Since it had experienced an integration and

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The Curse of Subsidies—Some Remedies

By HON. RALPH W. GWINN

Editor's Note: **In his remarks before the House of Representatives on August 12, 1954 Congressman Ralph W. Gwinn of New York, spotlighted the serious extent to which powerful groups have wrecked the floodgates of constitutional limitation on the right of Congress to buy votes through the extension of governmental subsidies for all manner of projects demanded by these groups. The remedy for this evil which could eventually make all citizens the puppets of big government lies in the hands of the people, Congressman Gwinn believes.**

MR. GWINN. Mr. Speaker, some time ago the Government took by force private property by taxation and gave big gobs of it to the beef cattlemen. In effect, beef became the public property of the Government. More and more people went into raising beef for Government subsidies. Surpluses of cattle increased. Prices to the consumers were fixed high by the Government, in spite of increasing surpluses.

Beef Revolts

Suddenly the people quit eating beef. They struck. Just as suddenly the sturdy big-hatted ranchers woke up to the fact that they were raising socialized beef for Government, a most unreliable political customer. They had lost their real dependable customers, the American people. So the cattlemen took a vote and threw out Government price supports and control of their business. They chose the hard road of winning back their customers in a free beef market. That meant lower prices, but increased beef consumption from 62 to 76 pounds per capita—an alltime record. Congress was not smart enough to stop subsidies, but the cattlemen were.

Potatoes Gain Freedom

The potato growers were corrupted for years by Government checks totaling $478 million. They, too, delivered their potatoes to the Government instead of the consumers. Suddenly the taxpayers were shocked to see the Government paying farmers for potatoes with taxpayers' money, then burning the potatoes to make them scarce to keep the prices high. To make it worse, after destroying the potatoes on one side of the road, the Government bought potatoes from Canada to feed the people on the other side. Year after year Congress could not stop it. The people did stop it. Potatoes won their freedom from Government. And tough as freedom is, potatoes would not go back into socialism, viz, management, ownership, and control by the Government.

People Reject Government Housing Too

In the same way the Government has been insisting on taking by force private property and building publicly owned Government houses. It rents them at half rent, exempt from taxation. The billions of taxpayers' money cannot be accurately counted. Of course, Government expects tenants to vote right in return for such favors. A very narrow majority in Congress has been insisting lately on forcing public houses on to the people in spite of the fact that the people do not want them. Generally wherever the people vote they throw out Government housing, keep their own money at home, and build their own houses.

Schoolboys Understand But Congress Doesn't

Now come the people of Tennessee telling the true story of TVA, the first and most highly touted of American socialistic experiments. It is turning out very badly for Tennessee. For Tennessee has become totally dependent upon Government for electric power and appropriations from Congress. It is falling behind the other 10 Southeastern States in production and distribution. That is because the other States are not dependent on what Congress may or may not do. The other States make and pay for their own electric power and depend on themselves. Tennessee has found by bitter experience that business firms will not move into their State where electric power depends on Congress taking money by force from far-distant States. What's more, Congress is finding it more and more impossible to buy votes in Tennessee by charging the cost to Massachusetts, New York, Illinois and other States. Even the little schoolboys now define TVA as "a river that flows through 7 States and drains 41." Yet they are being drained again in 1954 for the 22d year. The total take to date by TVA is $1,800,000,000—all from taxpayers.

This year be it noted, a Republican Congress is appropriating less than any year before, but it still gave $120 million to build steam plants. That will help heat Tennessee houses with electricity, though Tennesseeans have plenty of coal in their backyards which they could use. They could also use oil like other people. But it is cheaper to use electricity so long as taxpayers in other States can be socked to provide it. But Tennessee knows that no scheme to buy votes as crazy and incredible as TVA can last. This administration has already given fair warning. So Mr. Robert M. Metcalf, Jr., vice president of Guaranty Mortgage & Trust Co., of Memphis, Tenn., comes up with this remedy. He proposed a new and greater TVA in Spotlight for the Nation. He says:

A New and Greater TVA

We are nearing a fork in the road.

With the inexorable march of events, it may not be far ahead.

Probably during this administration, our Government will be faced with a choice of what to do with TVA—for the long pull. The administration itself is pledged to a withdrawal of Government from the fields of industrial enterprise. The new Hoover Commission is already girding itself for that job; a task force of the Commission under Ben Moreell is working in the specific realm of water resources

and power. In the battle that has already raged for years in the press and through the Halls of Congress, the recommendations that come in from the task force may well bring on the climax.

With the taxpayer who lives elsewhere in the Nation naturally reluctant to continue being forced to invest in power facilities for Tennesseeans, the fight over TVA appropriations has become increasingly bitter.

The resident in the TVA region, on the other hand, sees TVA as a fait accompli and will declare war at the flick of a power switch when he feels that his city's growth has a ceiling being placed on it by threat of a power shortage. He realizes that it is unsound and risk-filled to be dependent upon Congressmen from all sections of the country to vote funds for his power expansion needs. Nonetheless that is the way it has been and still remains.

What would be the happiest solution of the problems posed by TVA —the best answer for the country as a whole and for the residents in the TVA region?

It is this: Sell the power-generating facilities to the people in the area it serves.

By this one stroke we would accomplish these great objectives:

1. Reverse one of the biggest socialistic steps the United States has ever taken.

2. Lift TVA off the backs of the Nation's taxpayers (as it has been with respect to (a) its demands for capital funds and (b) its nontaxpaying status, though a producing enterprise).

3. Get the ownership of TVA truly in the hands of the people (and they would be the people most concerned) with control of the vast project at home.

4. Give to TVA the dynamism and flexibility of private enterprise, with an ownership truly alert and responsive to power needs.

5. Eliminate the tyranny, abuse, and graft of politics to which an institution like TVA is so subject.

6. Stop the threat of a power shortage that constantly hangs over the TVA region because of dependence upon Congress for growth funds.

The legislative processes to bring into being this new TVA need not be labryinthine. They might well lead to the following steps:

1. Empowering TVA to issue bonds, debentures, preferred and common stock for private sale (in the order noted below), specifying that the United States Treasury shall be the ultimate recipient of all securities sales proceeds.

2. Sale of the senior securities first, in proportions that are normal for a public utility of that type.

3. Sale of the common stock, to be offered first to individuals residing in the TVA region. The equity would probably not be too large, after step 2 is taken, for the TVA region residents to take all of the stock. They would be allowed to purchase for cash, exchange for United States bonds or pay by installments.

4. Election of board members by the new owners and complete divorce of TVA from the United States Government. The cognizant State regulatory bodies would take over regulation, and from them must be obtained prior agreements to allow rates to go to proper economic levels.

Then Mr. Metcalf concludes by asking, "Could any American dedicated to basic principles ask for a better TVA?"

And so, Mr. Speaker, I propose to the people that they help Congress as Mr. Metcalf has helped with a new idea. That's where new ideas come from. No President, no Congress, no government can solve our problems without such help. For twenty years Congress indulged itself in a kind of vote-getting game, sometimes under the lash of a President, to redistribute the wealth. They indulged in doing good with other people's money without too much disturbance to conscience. If conscience were disturbed, alleged national defense relieved it.

But by now each group getting the benefits of the redistribution are running head on into each other or running out of benefits. Indeed the mess, which this Congress came into power 2 years ago to clean up, has smeared the faces of those who have quite diligently wrestled with it.

Which Subsidy To Knock Out First

If there are critics of the failure of Congress to reverse the New Deal trend and reduce taxes much more, let them answer these questions. Which particular group feeding in the public trough would they knock out first? Which subsidy law would they repeal to start with? They must be repealed one at a time. That is, which group's vote would they risk losing first? The attempt has been made.

Corn Attacks Peanuts

Three weeks ago the Illinois delegation in Congress representing corn attacked peanuts. Corn having been for nearly 20 years in the public trough and feeling quite secure said in effect: "Now what basic rights have peanuts to put their feet in this trough?" "Why the country would never miss them if we never raised another peanut. They are indigestible anyway." And corn called for a vote of all the others to throw peanuts out. Whereupon peanuts furiously counter-attacked with most devastating effect. They said, "Why of all those feeding in this trough that have grown sleek and fat and should be thrown out, it's corn. Above all others it should fall on its knees and ask forgiveness for its sins in the well of this House." So little peanuts, who really had no case at all shamed corn and scared the others so that the vote was 228 to 170 to keep peanuts in. After the fight it appeared that peanuts might get nearly as much subsidy as corn got for keeping itself padlocked in cribs so as to make itself look scarce and high priced.

Apples Take Interest

After that vote in which peanuts did so well, apples were heard tumbling all over themselves out in the Halls of Congress. They said, "Why sure enough we are just as basic as any of the rest. Besides we can be kept by freezing. What's more basic than an apple a day keeping the doctor away?" In the distance you could hear groups without number organizing the votes. So every seat in the House may be endangered unless the Member votes to give each new group theirs for no good reason except that all the others are getting theirs. When I asked a friend on the floor if this would ever stop, he answered "No; it will go on forever."

Government Substitute for God

Does not history prove that when government controls the economic laws of potatoes, it controls the moral laws of people surrounding them? If government owns your house, and rents it to you, it will tell you how to live in it. You may commit one sin or have one illegitimate child in government housing but not two. This is the rule in the housing authority book of morals in Houston, Tex. You are free to vote, of course, but if you vote against the party that provided your

(Continued on page 68)

The Eleventh Commandment of Training

The Evaluation and Adjustment of the Training Program

By DONALD J. WOOD

MANAGEMENT professionals can recite the ten commandments of training, but sometimes forget that there is an eleventh commandment. To insure the success of any training program, a complete training cycle demands an analysis and evaluation of the results in order to determine the effectiveness of the training, and the effect upon the morale and operation of the employe group.

In all successful training programs the department head is encouraged to check with his foremen to see if the employes are using the information and practices received in the training process. If the program is not achieving its objectives, then the training is not adequate, the employes are adamant, or the approach and the planning may be wrong. If any of these signals are noted, then adjustments and refinements in the program are necessary, and are initiated immediately.

I. It Takes Planning

Before the program is started, management generally establishes some methods of checking the results of the training, for if the work of the employe staff is not improving then the program must stand analysis, and improvements made.

This check includes all segments of the plan, and careful study is made of the program, the subject matter, the methods of training, the enthusiasm and attitude of the staff, and the executive or trainer delegated to perform the training function.

II. It Takes Observation

Another excellent means of evaluating the program is to study the work of the employes. Management has found that scheduled conferences with the foremen group can readily produce the results of a training program. Foremen are encouraged to note the individual man and his work performance.

After each individual man and his work is analyzed by his immediate foremen, then the results of the individual departments can be studied to determine whether there has been any improvement in operation or morale as a result of the training plan.

The object of employe evaluation is to determine the progress of each employe. This evaluation is a determination of the value of the training, and its effect upon each employe—and at the same time—his worth to the company and his potentiality as a future executive.

III. It Takes an Analysis

Another question that the training leader could ask himself is whether the program is stimulating the employes to improve themselves. It should be remembered that many of the values received from training are intangible, and cannot be measured, but a check is made to determine:

1. If the program is headed in the right direction, and
2. If the program is making progress towards the established objectives, and
3. If the program is satisfying the needs listed when the training was initiated.

IV. It Takes Patience

The integration of training into daily work habits is not easy, and the training leader should not expect miracles to be worked overnight; nevertheless, he can feel the pulse of the staff and the program to determine if the training plan is progressing satisfactorily. Never should he draw conclusions, unless a careful and analytical study has been made, for unreasonable and hasty generalizations may doom the program to failure.

In evaluating and determining the success of a program four improvements should be noted:

1. A definite and permanent improvement in the work of the employe group, the trainees.
2. More cooperation and loyalty within the organization.
3. Improved morale in the department.
4. Enthusiasm for self-improvement.

If any of the four, or all of these factors, are not present, then it is time to change and improve the training procedure. If no improvement is noted, then the training leader changes the subject matter, the methods of teaching, or the programming.

When changes are necessary, changes should be made; there is an old axiom that everything can be improved, and the training program is not excluded.

V. There Are Rewards

This appreciation of a company's responsibility to train and develop its employes through a carefully planned, executed and evaluated training program benefits each individual company, employe, and society.

The company benefits through increased morale, better production, less turnover and absenteeism, elimination of wasteful practices, encouragement of initiative and ambition, and better public relations with its customers.

The advantages of a training program to the employe group are:

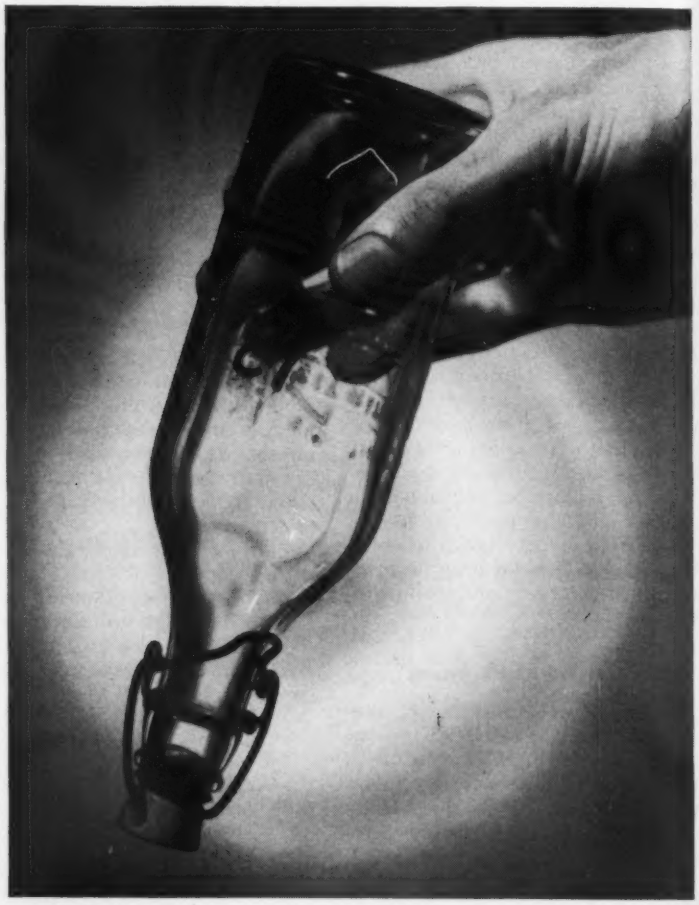
1. the satisfaction of the desire for security; greater job security through a knowledge of how to do the job better,
2. the satisfaction of the desire for recognition,
3. the satisfaction of the desire for self-expression,
4. the satisfaction of the desire for a new experience,
5. more opportunities for increased earnings,
6. more job satisfaction and interest, and
7. better opportunities for promotion.

And can it be denied that the community has not benefited from the training and betterment of the employes? It is axiomatic that everyone in a democracy must have equal opportunity to improve himself and his family according to his ability. Modern management has accepted this tenet, and is providing the employe with the chance to improve himself. No one can deny that when an employe attains full personal development and efficiency, the community becomes a better place to live. The need for sponsoring ways and means to improve the average employe has become more realistic in recent years, for industry has become more social-minded.

LIBERTY MUTUAL

The Company that stands by you

This bottle of air may save men's lives. Shipped upside down, sealed with mercury, this bottle contains air from the plant of a Liberty Mutual policyholder. It is one of some 3000 air samples shipped last year to Liberty's industrial hygiene laboratory for measurement of air pollution. Another 2000 samples were analyzed by hygienists in the field. This constant supervision prevents occupational diseases caused by fumes, vapors and dusts. By discovering danger early and advising control measures, Liberty protects the health of countless workers.



How you benefit by being an owner...

Your Liberty policy on your home, car or business gives you the advantages of mutual enterprise. You're an *owner* who shares in savings. Yet your policy is non-assessable.

The Liberty Mutual people who serve you are employees of *your* company. They're paid salaries to look after *you*. They have no other axe to grind.

Over forty years ago, policyholders like you founded Liberty — business men who wanted better insurance service at lower cost. As *owners* they kept Liberty ahead in loss-prevention ideas of every sort. Result: thrifty, sound insurance.

LIBERTY MUTUAL

HOME OFFICE: BOSTON

LIBERTY MUTUAL INSURANCE COMPANY · LIBERTY MUTUAL FIRE INSURANCE COMPANY

"I had to hit something. I missed the youngster by an inch but crashed into a car parked at the curb. I was a hero to everybody except the people whose car I hit. They wanted their damages paid. When I telephoned Liberty Mutual, the claimsman lifted the worry right off my shoulders — said my responsibility would be met fairly and promptly." Liberty's *direct service* is better and quicker service. There are Liberty offices, coast-to-coast, and in Canada and Hawaii.

Whiffle-hound teaches children safety on the streets. This amusing dog (*his name is "Safety"*) has eyes that flash red and green. On film, in booklets and in person, he travels around the country to show school kids how to avoid getting hurt. The Whiffle-hound is part of Liberty Mutual's many-sided program to increase pedestrian safety — to save lives and injuries and to keep insurance costs low.

NEWS FORUM

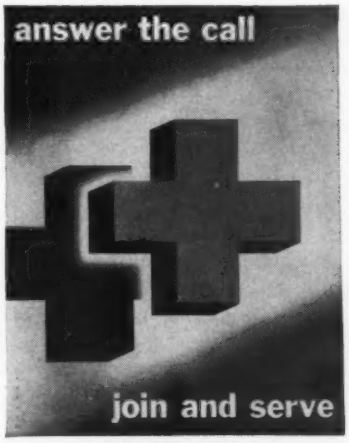
This department includes a digest of news and comment about Connecticut Industry of interest to management and others desiring to follow industrial news and trends.

PITNEY-BOWES, INC., Stamford, manufacturers and distributors of postage meters and mailing machines, has been named a principal distributor of the Macey Company's paper collating equipment, according to Harry M. Nordberg, Pitney-Bowes vice president for sales and service. Previously, the sole distribtuor had been Harris-Seybold, Inc., of Cleveland, Macey's parent company.

Business, industry, institutional and government users of Macey collators will now have the added advantage of Pitney-Bowes' nationwide sales and service organization of more than 1,600 men, operating out of some 250 sales and service points maintained by Pitney-Bowes in the United States and Canada.

Macey collating equipment, replacing the hand assembly and gathering of paper forms, bulletins, catalogs, instruction manuals, and many other forms, comes in 16 fully electric, automatic models with from 4 to 16 "stations", or hoppers of material to be collated.

★ ★ ★



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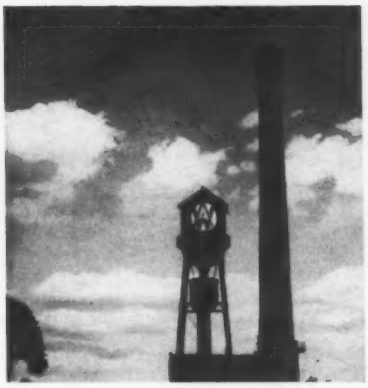
THE COVER



This months cover is a photo of the smokestack and tank at the Acme Wire Company's plant in Hamden, Conn.

A NEW TWELVE PAGE CATALOG illustrating the stamping, drawing, forming and heading facilities of its Fabricating Division has been announced by The Plume & Atwood Manufacturing Company, Thomaston.

Plume and Atwood will shortly be in full operation in its new 150,000 square foot fabricating plant built to their specifications and located across the Naugatuck River from the Rolling Mills. With additional stamping and forming equipment, its facilities will be among the most modern in the industry, according to company officials.

The colorful new catalog also shows how by combining operations several items are now produced by Plume & Atwood at substantial savings.

A REVOLUTIONARY NEW carbide-tipped reamer that guarantees new performance, longer life and lower cost has been introduced by The Nelco Tool Company, Manchester. The company has named this new tool the Five Star Reamer as it incorporates five star features which are said to create efficiency and economy.

These features are included in the tool: Protected Centers make true regrinding sure and easy, even after prolonged hard use; unequally spaced teeth eliminate vibration and chatter; new Nelco super strong braze resists stress and permits use of harder grade carbide than is found in conventional reamers; extra long carbide tips to allow more regrinds, longer tool life, greater tool economy; hard chrome plates flutes on hardened tool steel body create an even surface for running in guide bushing.

★ ★ ★

TWO NEW BULLETINS, outlining the features, manufacturing methods and applications of the company's full line of socket screws has been published by the Socket Screw Division of The Bristol Company, Waterbury.

Including tables of nominal sizes, basic dimensions and tolerances of the American Standards for screw threads, as well as engineering data and specific application information for each type of screw, the twenty-page two-color bulletins are well illustrated with photos and line drawings.

Information is given on socket set and cap screws, flat head cap screws, pipe plugs and shoulder screws, as well as for screws of special shapes, sizes and materials.

Both bulletins are available on request from The Bristol Company, Waterbury 20, Conn.

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THOMAS I. S. BOAK, president of the Plume & Atwood Mfg. Co. announced recently that Edward W. Seymour has been elected secretary of the company. Mr. Seymour succeeds David Williams, who has retired.

Mr. Seymour joined the Plume & Atwood organization in 1947. He has been office manager of the Fabricating Division, assistant controller and assistant secretary.

Prior to his association with the Waterbury firm, he was on temporary assignment with the Bureau of Sup-

plies and Accounts of the Navy Department in Washington.

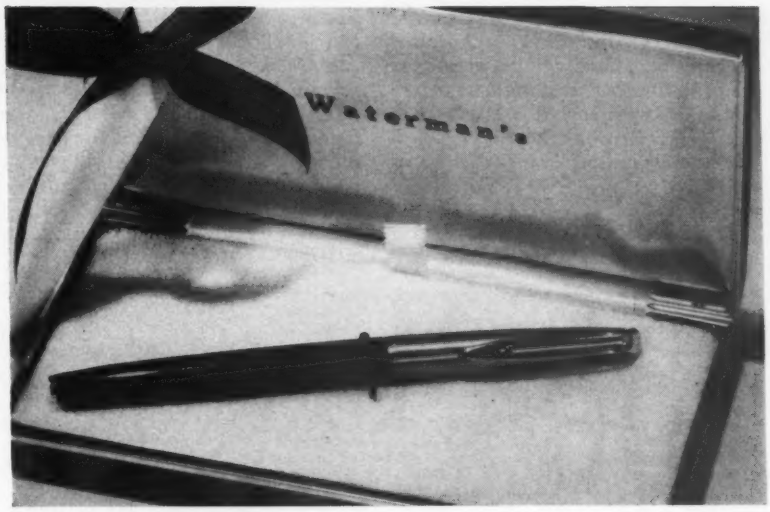
Mr. Seymour had also been employed as assistant to the president of Jefferson Island Salt Company in Kentucky and salesman for National Cash Register Co., Dayton, Ohio.

★ ★ ★

THE SECOND HOOVER COMMISSION, now in the final stages of its study of the Federal Government, has recently made a progress report to Congress. Dated December 31, 1954, the report, signed by former President Herbert Hoover, the chairman, informed the Congress that within the next few weeks the Commission expects to submit to Congress its recommendations based on reports submitted by seven of its task forces. Other reports will follow as they are completed, studied and Commission action taken.

Fourteen important areas of government have been the subject of inquiry by the Commission, whose objective was well described by Herbert Hoover when he said, "The major purpose of the Commission is to find ways of saving money for the taxpayers."

Public support for the recommendations of the forthcoming Second Hoover Report is being organized from coast to coast by the Citizens Committee for the Hoover Report. Encouraged by the unprecedented record of the First



THIS IS THE NEW Waterman C/G 1250 with the revolutionary cartridge filling method that eliminates the need for ink bottles. For a fresh ink supply, a hermetically sealed, leak-proof cartridge is slipped into the barrel.

Hoover Report—over 70% of its recommendations adopted—voluntary bipartisan groups are being organized in each state, building up a grass-roots demand for better government at a better price through the adoption of this latest Hoover blueprint for Federal reorganization.

★ ★ ★

THE FORMATION of Kaman Aircraft of Canada, Limited, was announced recently by Charles H. Kaman, president of the Kaman Aircraft Corporation, Bloomfield. Kaman Aircraft of Canada is a wholly-owned subsidiary of the parent corporation and is located in St. Catharines, Ontario. The Canadian subsidiary has been established to enable Kaman to be in a position to enter the Canadian helicopter market which is now beginning to show considerable promise militarily and commercially.

ENTHONE, INC., New Haven, have announced that a new four-page illustrated folder is available which describes Enthone "Enstrips". These are described as materials for selective stripping of one metal from another—nickel from steel or copper, tin or tin-lead from copper or steel, and copper from steel. A handy chart is included to enable easy selection of the proper stripper for any particular job.

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SCOVILL MANUFACTURING COMPANY has announced the appointment of Arthur P. Hickcox, vice president, to be general manager of the firm's main plant operations in Waterbury. He joined Scovill in 1910, was named general purchasing agent in 1920 and was elected a vice president in 1940 and a director in 1944. He is a graduate of Wesleyan University.

Succeeding him as director of purchasing is Lewis F. Cobb, who has been assistant director.

★ ★ ★

FRIENDS and fellow workers tendered a testimonial dinner to Robert C. Swanton, director of purchases of the Winchester operation of Olin Mathieson Chemical Corporation, recently, marking his retirement, under the company pension plan, after 39 years of service.

Mr. Swanton retires from active business as one of the outstanding figures in the nation's purchasing field, the recipient of many local, state and national honors, and, in 1952, the award of the J. Shipman Gold Medal, highest award in national purchasing circles. The Shipman Medal, founded by the Purchasing Agents of New York in 1930, is awarded each year at the National Association of Purchasing Agents Annual Banquet "to one who by precept, example or distinguished service, has contributed to the advancement of purchasing."

Mr. Swanton plans the development of a consulting program of national scope, on purchasing and materials management, as well as special economic analysis work, along the lines of the business survey.

★ ★ ★

JOHN B. GOSS, assistant secretary of Scovill Manufacturing Company, Waterbury, has recently resigned that post. Mr. Goss started work with the

ENTHUSIASTIC thousands attended the General Motors Motorama of 1955 at the Waldorf-Astoria Hotel to see the newest cars of today and tomorrow. Attending the Motorama preview were (left to right) Harry T. Burgess, New Departure, Meriden plant manager; Seth H. Stoner, general works manager; Harlow H. Curtice, president of General Motors; William J. Ryan, Bristol plant manager and Alfred F. Herold, Sandusky plant manager.

firm in 1928 and was the first to be enrolled in the advanced training course. He was elected assistant secretary at the annual meeting in 1947, but has been on sick leave for the past two years.

He is a son of the late John H. Goss, who was president of the company from 1938 to 1944.

★ ★ ★

LEE P. SMITH, has been appointed controller of the Bush Mfg. Co., West Hartford according to a company announcement.

Mr. Smith is a graduate of Babson Institute of Business Administration and prior to joining Bush was associated with the Peck, Stow & Wilcox Co., where he was secretary and assistant treasurer for several years.

★ ★ ★

ALL PATENTS, trademarks, patterns and other assets of the Branford Oil Burner division of the Malleable Iron Fittings Co., Branford, have been sold to a new corporation, Branford Tank and Heating Products, Inc.

The transaction was announced by Harrison M. Lang, manager of the Malleable Iron Fittings Co. oil burner division and vice president and general manager of the new corporation.

The Branford Burner was designed by Forrester Hammer in the early 1900's and has been manufactured by the Branford company since the days of the steam-driven automobile.

The newly formed corporation which purchased the Branford Burner patents and trademarks will have its headquarters at 286 Howe Avenue, Shelton. The new company will also absorb the Derby Tank and Welding Company of Shelton. John M. Fudock will be president of the new corporation.

A. W. HAYDON, Waterbury, has been elected a vice president of Consolidated Electronic Industries Corp., Jackson, Michigan. Mr. Hayden is president of the A. W. Haydon Division of North American Philips Co. in Waterbury, which has recently been purchased by Reynolds Spring Co.

The Reynolds firm and Stubnitz Greene Spring Corp. were merged to form the Consolidated Electronic Industries Corp.

★ ★ ★

THE RETIREMENT from active management of Oliver V. Ober, executive vice president of United Advertising Corp., New Haven, after 34 years of service, was announced recently.

Named to succeed Mr. Ober as general manager of the United's operations in New England, is Richard O. Gibbs, who joined the company in 1952 and was elected a vice president last October.

Mr. Ober has long held a position of prominence in the business and community life of greater New Haven. He joined United Advertising Corp. in 1920 from the position of advertising manager of the N. K. Fairbanks Co. He rose successively with United Advertising Corp. through the positions of sales manager, treasurer and vice president, to his present key position as executive vice president, which he assumed in 1952.

★ ★ ★

THE TORRINGTON COMPANY, a manufacturer of anti-friction bearings, industrial machine needles, swaging machines, precision metal products, bicycles and cycle parts, is currently investigating possibilities for diversifying its operations further, according to a recent statement by Walter C. Thompson, president. The firm operates ten plants in the United States, Canada, England and Germany.

★ ★ ★

F. E. ENDRISS has been elected treasurer of Peter Paul, Inc., it was announced by John H. Tatigian, president. Mr. Endriss succeeds Harold G. Kazanjian, who has been elected executive vice president of the candy firm.

Mr. Endriss began his accounting career in 1917 with the Southern New England Telephone Company as an auditor. In 1918 he joined the Winchester Repeating Arms Co., New Ha-

ven. He became affiliated in 1929 with the National Folding Box Co., a subsidiary of Federal Paper Box Co., and was accountant in charge of credit collections, later being elected as assistant treasurer and in 1951 as director and treasurer.

★ ★ ★

JAMES P. GANTLEY has been elected vice president and secretary of The Fenn Manufacturing Company of Newington, according to an announcement by W. L. Fenn, president.

Mr. Gantley joined Fenn in 1942 as comptroller and subsequently held the additional post of assistant treasurer. Prior to joining the Fenn Company he had been associated with the accounting firms of Price, Waterhouse and Company of New York and Hadfield, Rothwell, Soule and Coates of Hartford.

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A NEW DEVICE for supplying beach heads and other confined combat areas from the air has recently been revealed by the U. S. Navy Office of Naval Research and the Kaman Aircraft Corporation, Bloomfield.

The device, which is known as a rotochute, is being developed for the United States Marine Corps. It will permit supply aircraft to drop equipment and supplies from lower altitudes at higher speeds and with greater accuracy than is possible with a parachute. Parachutes must be dropped from relatively high altitudes and are subject to wind drift, making pinpoint landings difficult.

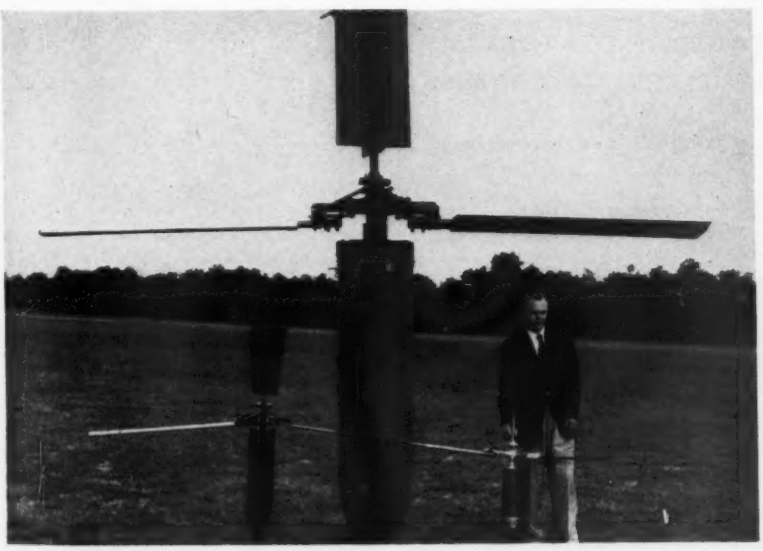
The rotochute consists of two rotor blades attached to a hub, the entire assembly resembling the rotor of a small helicopter. The rotochute in turn is attached to one end of a standard military M2 supply container, a type of container currently being used by the Marine Corps for supply drop by parachute.

Under contract with the office of Naval Research, Kaman Aircraft has made about 700 experimental rotochute drops over the past several months. Current tests are with the actual M2 container fully loaded and dropped from low altitudes at high speeds by a Grumman F7F twin-engine Marine Corps fighter.

★ ★ ★

R. S. HOLMES, nationally known small arms ammunition authority, has been appointed manager of the research and development department of the arms and ammunition division of the Olin Mathieson Chemical Corp.

Mr. Holmes, who is the holder of patents on Western-Winchester shot shells, produced by the arms and ammunition division, came to New Haven in 1952 from East Alton, Illinois as manager of ammunition research.



DEVELOPMENT STEPS of the rotochute for the Marine Corps by Kaman Aircraft are shown in this photo. In the center is a standard Military M2 air-drop container with a full-scale rotochute attached. On the left is a one-third scale model; on the right a one-sixth scale model.

He supervised the research and development on the new Western-Winchester magnum shot shell for standard shotguns, which was introduced only last August. The powerful new shell was designed to reduce crippling loss in the shooting of wildfowl.

★ ★ ★

MORE THAN $80,500 in suggestion awards was paid to 1,700 Pratt & Whitney Aircraft employees during 1954, according to William P. Gwinn, general manager. It was the largest amount in the history of the company's current suggestion award program, which went into effect last March.

Awards last year ranged from the minimum of $5 to the maximum of $2,500, and involved a variety of improvements, from a major change in a jet-engine production operation to a change in an office filing system.

There were five maximum awards of $2,500—the largest number in any single year of the program.

★ ★ ★

AT A SPECIAL MEETING recently, stockholders of The Norden Laboratories Corporation approved a proposal for the integration of the business and property and assets of the corporation with Ketay Instrument Corporation, it has been announced by Paul W. Adams, president.

The integrated business will be conducted under the name of Norden-Ketay Corporation. Morris Ketay, president of Ketay will be president of Norden-Ketay and Mr. Adams will be executive vice president.

★ ★ ★

CHARLES H. COSTELLO, vice president and director of C. Cowles & Co., New Haven, has been elected a director of the National Association of Manufacturers.

Re-elected to the board of directors from Connecticut were Dexter D. Coffin, Sr., president and general manager, C. H. Dexter & Sons, Windsor Locks; Ralph A. Powers, president, Robertson Paper Box Co., Montville, and Richard L. White, chairman of the board, Landers, Frary & Clark, New Britain.

A NEW, eight-page booklet published by Waterbury Farrel Foundry & Machine Co., Waterbury, covers the company's line of tandem mills used for high speed reduction of non-ferrous and ferrous rod.

The bulletin, printed in two colors, includes many illustrations showing various sizes of WF tandem rod mills plus work samples and a cross-sectional reduction sequence. The text discusses the advantages of reduction by rolling and describes the function and application of the Farrel mills. Details are given of WF design and construction features which are factors in reducing operation costs. The payoff unit, straighteners, coilers and cooling method are discussed, in addition to the mill operation itself.

Free copies of this new booklet can be obtained from the company by requesting circular 729-R.

★ ★ ★

MAJ. GEN. KIRKE B. LAWTON, U.S.A., retired, has been elected a director of The Gray Manufacturing Company, producers of Audograph Soundwriter dictation equipment, PhonAudograph central dictation systems and specialized electronic communications devices, it has been announced by Walter E. Ditmars, president.

General Lawton was Commandant of Ft. Monmouth, N.J., from 1951 until his retirement in August. Prior to that time, he was assigned responsibility for presenting the Signal Corps budget to the appropriations committees of the Senate and House, from 1946 to 1951. He was Deputy Chief Signal Officer of the Army from 1948 to 1951.

★ ★ ★

BIG NEWS in the field of lockmaking was announced recently by the P. & F. Corbin Division of The American Hardware Corporation when the firm introduced a new line of redesigned and improved "900" series Unit Locks and Latches and in 13 functions.

The new unit locks are said to incorporate the revolutionary Corbin exclusive locking principle which made the older versions the first choice of discriminating architects and contractors.

The Titan, Crestwood, Knollwood, Windsor, and "900" Design have frames made of strong extruded brass metal. All internal parts are made of non-ferrous metal or zinc-plated, dichromated steel.

THE APPOINTMENT of Frank J. Wandyes as plant superintendent of The Henry G. Thompson and Son Company, New Haven, has recently been announced.

Mr. Wandyes, a mechanical engineer, became associated with the Thompson organization to redesign new machinery and make changes in the manufacturing process which would assure improved product quality. His success in this field led to his appointment as assistant plant superintendent, the position he held prior to assuming his present post. Mr. Wandyes' new duties include responsibility for plant production, maintenance and labor relations.

★ ★ ★

A VERSATILE new hydraulic marking machine for universal use on virtually every material and contour has just been introduced by The Parker Stamp Works, Inc., Hartford.

The Parker #650 marking machine is said to cleanly, indelibly stamp lettering trademarks, knurling, graduations and other legends on flat, concave or convex surfaces with speed and ease. Production marking of hundreds or thousands of pieces is possible in less time, with more precision than conventional hand stamping.

Parker engineered features such as a foot pedal which allows operator the use of both hands, cushioned hydraulic pressure to eliminate contact shock on marking tools, and simplified controls make the #650 easily operated even by unskilled hands.

★ ★ ★

THE GRAY MANUFACTURING COMPANY, Hartford, is developing new products designed to improve internal security in industrial plants and military facilities, it was recently announced by Walter E. Ditmars, president. He also announced the appointment of Howard M. McCoy as manager of the program. Mr. McCoy is a recently retired Air Force Colonel and former director of the Physical Security Equipment Agency of the Department of Defense.

"The new equipment which Gray is developing will permit those industrial plants and commercial facilities which maintain their own guard forces to perfect their internal security against sabotage, arson, burglary, and other types of casualty losses resulting from unauthorized entry," according to Mr. Ditmars.

★ ★ ★

CONSTRUCTION WORK is nearing completion on an expansion of the manufacturing plant of The Bristol Company, Waterbury. Heat treating facilities at the plant have also been increased to process a much larger volume of instrument parts and socket screws.

In addition to manufacturing facilities, an expansion in office space is being carried out to provide added room for the engineering and research departments.

★ ★ ★

THE AMERICAN BRASS COMPANY, wholly-owned subsidiary of Anaconda Copper Mining Company, will soon construct an integrated aluminum mill on the outskirts of Terre Haute, Indiana, according to a joint announcement issued recently by Anaconda president, Robert E. Dwyer and Arthur H. Quigley, chairman of the board of The American Brass Company.

"The Terre Haute fabricating facility will be a logical extension of Anaconda's already announced entry into the aluminum field," the statement said. "In 1953 the Anaconda Aluminum Company started construction of a new aluminum reduction plant at Columbia Falls, Montana. Eventually this plant will attain an annual production of 60,000 tons of ingot aluminum."

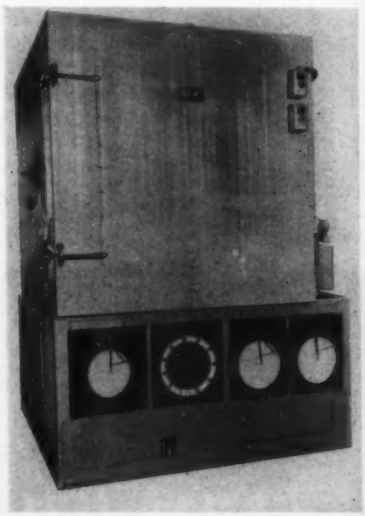
At Torrington, the American Brass Company has been producing relatively small quantities of aluminum sheet and strip for the past few years.

James F. Ackerman, currently serving as vice president of The American Brass Company's Torrington plant, will be in charge of the new aluminum fabricating operation at Terre Haute.

★ ★ ★

A NEW DESIGN in the simulation of high altitude conditions has been incorporated in a new chamber recently delivered by American Research Corp., Bristol to the Aeronautical Division of Minneapolis-Honeywell Regulator Company.

The chamber utilizes radiant heating and cooling from the five walls and the door in addition to the normal method of heating the air. By this means radiant heating and cooling is provided at all altitudes up to 130,000 feet.



THIS CHAMBER provides a 24 cu. ft. work space and can reproduce relative humidity of 5% or less within a range of 160° to 200°F.

The special feature of the chamber is that by means of a thermocouple switch the control point of the temperature may be changed from the surrounding air at or near sea level to the wall radiation at high altitudes, thus exactly reproducing the conditions encountered by instruments and other gear where air is virtually non-existent.

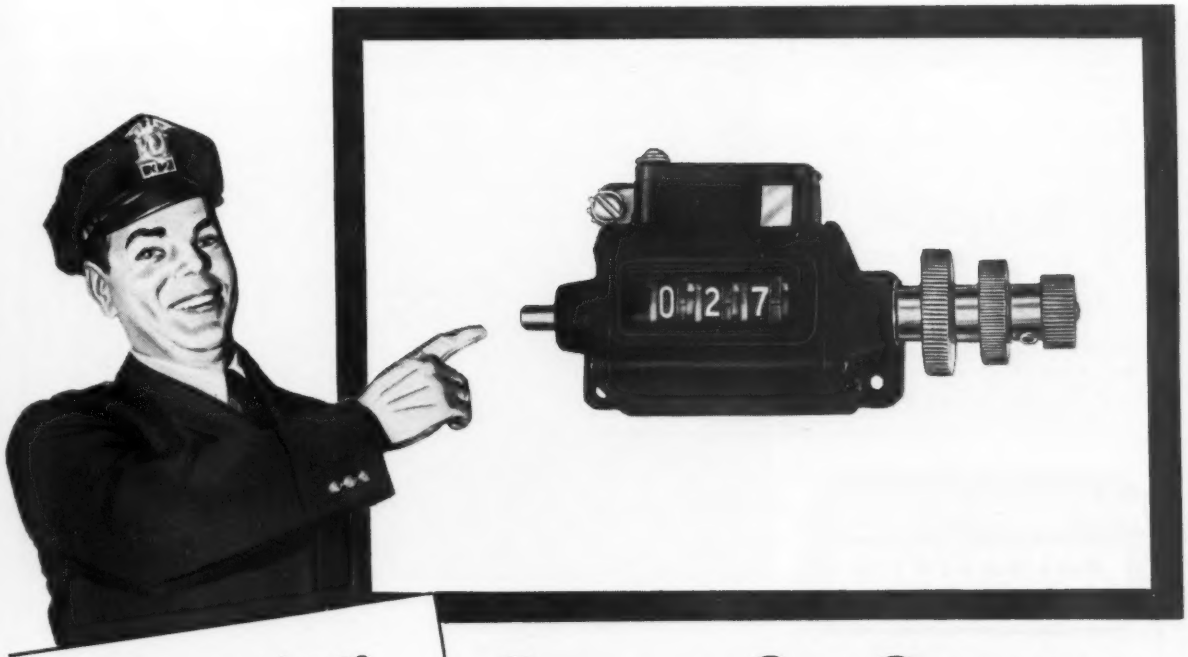
★ ★ ★

THE ELECTION of John C. Molinar as vice president and general sales manager of Niles-Bement-Pond Company, West Hartford, has been announced by A. H. d'Arcambal, president and general manager. Mr. Molinar will be responsible for the sales activities of the company, both domestic and foreign. He will also direct

Here's a New

"TRAFFIC COP"

for short high-speed runs



Added Evidence that—

Everyone Can Count on VEEDER-ROOT

This new small Predetermining Ratchet Counter is set for any run up to 1,000 counts, pieces or other units by the three knurled setting knobs. Then it subtracts to zero, and at that point actuates a contact to light a light, ring a bell or stop the machine. Compact and easy to reset, this counter makes an attractive new selling feature when built into a machine as a standard integral part. And it's just one of scores of standard and special Veeder-Root Counters for every mechanical and electrical application in any field from atomics to automation. What would *you* like to count? Let Veeder-Root figure out how to do it. Write:

VEEDER-ROOT INCORPORATED
HARTFORD 2, CONNECTICUT

Chicago 6, Ill. • New York 19, N. Y. • Greenville, S. C.
Montreal 2, Canada • Dundee, Scotland
Offices and Agents in Principal Cities

® **"The Name that Counts"**

the activities of the advertising and market research departments.

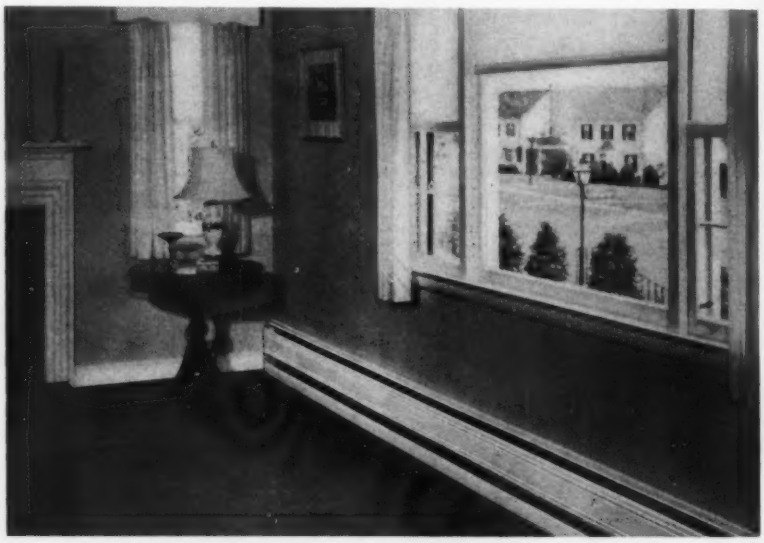
Mr. Molinar entered the employ of the company in 1922 as a sales trainee, immediately after his graduation from the Massachusetts Institute of Technology as a mechanical engineer.

Mr. d'Arcambal also announced that James D. Allan, manager of domestic machinery sales of Pratt & Whitney will direct the machinery sales of all divisions of the Niles-Bement-Pond Company.

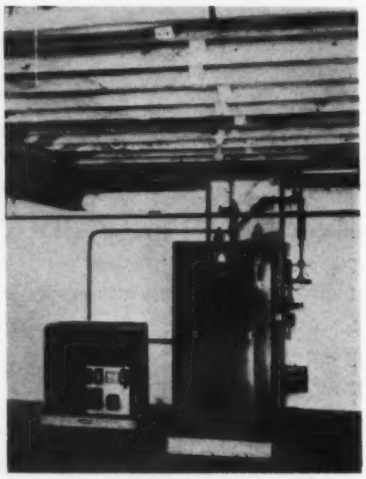
★ ★ ★

A YEAR-ROUND integrated baseboard heating-cooling system has been announced by Gordon Bennett, executive vice president of The Vulcan Radiator Company, Hartford, pioneers of fin-tube baseboard radiation in America. This central "home-conditioning" system introduces a new concept in air conditioning and promises to set a fast pace for the industry during 1955, according to the company.

Mr. Bennett pointed out that Vulcan's new development is the latest and most spectacular advance in year-round "home conditioning" yet produced by the hot water and steam heating industry.



VULCAN BASEBOARD "home conditioning" combines the finest elements of interior design and functional beauty.



HEATING and cooling facilities take up little room in the basement. Flexible ducts and blower are located overhead.

The new system has been integrated with Vulcan's line of baseboard radiation so that by a flick of a switch the home owner can command either warm of cooled air from the same baseboard installation. A slow air circulation affords a minimum amount of drafts and provides a blanket of cool or warm air over entire wall areas as seasonal requirements demand.

★ ★ ★

THE DOLAN STEEL COMPANY, one of the largest warehouses in New England supplying sheet and strip steel exclusively, was recently presented with a certificate of recognition by General Motors Corporation.

The occasion for the citation was the production of General Motors' 50 millionth car at the Chevrolet Assembly Plant, Flint, Michigan in November.

The certificate was presented to the Bridgeport firm for "its contribution to and membership on a production team responsible for . . . the building by General Motors in the United States of fifty million motor vehicles."

★ ★ ★

SUCCESSFUL RESULTS with a powder that speeds the action of acids for dissolving defective chromium and nickel from copper base metals without injuring the base metals were disclosed recently by Enthone, Inc., New Haven.

The announcement was made shortly after the receipt of a patent issued to the inventor, Dr. Walter R. Meyer of Hamden, president of Enthone, Inc.

The new patent, U. S. Patent No. 2,698,781 is titled "Accelerating Action of Acids on Metals." The products sold under the patent are designated on the market as Enstrip "S" and 165S.

★ ★ ★

THE NEW HAVEN COPPER CO., Seymour, has announced a $1,000,000 expansion program which will include the construction of two new factory buildings and modernization of present facilities.

An additional 25,000 feet of manufacturing space will be afforded by the new buildings where production will begin in the fall, it is planned.

The firm is a wholly owned subsidiary of the Tennessee Corp. of New York City.

★ ★ ★

W. D. MACDERMID, president of The W. D. MacDermid Chemical Company, Bristol, has announced that arrangements have been completed with Lawrence Smith & Co. Pty., Ltd., of Sydney, Australia on a license royalty basis whereby the Australian firm will manufacture MacDermid Chemical Company formulations and handle their distribution and sales to the metal finishing industry in Australia and New Zealand.

★ ★ ★

F. L. MORROW, president of North & Judd Mfg. Co., New Britain, has announced the purchase of the spot and spot setting machine business of the Milford Rivet & Machine Co., of Milford. North & Judd has been for many years one of the leading manufacturers of spots.

Spots are described as the metal or-

naments used to decorate such items as dog collars, children's western style belts and holster sets, men's and ladies' belts, shoes and related items.

The manufacture of cold-headed fasteners, in the billions, and rivet-setting machines, constitutes the principal operation of the Milford company. Sale of the spot business, according to President Fred H. Merwin of the Milford firm, will give his company space for new product development in the fastener field.

★ ★ ★

DR. MAX A. GELLER, chief officer of the New Haven Clock and Watch Co. since 1950, has resigned his positions as chairman of the executive committee of the board of directors and as chief executive officer of the company.

Announcement of Dr. Geller's resignation was made by John M. Bergen, chairman of the clock company's board of directors.

★ ★ ★

TWO TOP EXECUTIVE PROMOTIONS have been announced by Joseph S. Miller, president of the New Haven Board & Carton Co.

Julian H. Morgan was advanced to vice president from serving concurrently as treasurer, controller and secretary. William R. Tittle was named secretary. He was assistant treasurer.

★ ★ ★

EDWARD V. MCDONOUGH, manager of cost accounting at Pitney-Bowes, Inc., has been appointed comptroller effective April 1, it has been announced by Harold Camp, vice president for finance. Mr. McDonough succeeds Frank H. Van Duzer who has resigned to become comptroller of Daystrom, Inc., of Elizabeth, New Jersey.

Mr. McDonough joined PB as a war work accountant in 1942, has supervised the payroll department, directed job evaluation in the personnel department, and served three years in planning and scheduling before becoming manager of cost accounting four years ago. He recently earned a master's degree at Columbia University Graduate School of Business.

★ ★ ★

THE ARMSTRONG RUBBER COMPANY of West Haven has announced a new unconditional road hazard lifetime guarantee against stone bruises, blowouts, rim cuts and any and all road hazards without limit as to time or mileage for all Armstrong passenger tires.

According to the terms of the guarantee, the company will replace every tire covered by the guarantee with a new tire of like size and type on a pro rata basis. The customer receives credit for the unexpired normal life of the tire as determined by the depth of the original non-skid tread design remaining on the tire.

The new guarantee replaces the company's previous ones of eighteen, twenty-four and thirty-six months for certain types of passenger tires.

★ ★ ★

A SUGGESTION PLAN has recently been put into effect by the R. Wallace & Sons Mfg. Co., Wallingford, according to an announcement by E. B. Danzell, vice president, and also chairman of the Wallace Suggestion Plan Policy Committee. Most employees who are not supervisors will be eligible for cash awards. Winning ideas must be put into effect by the company before an employee receives his check.

Mr. Danzell said "The success of a business and the security of its employees are based upon a continuing flow of ideas. These ideas may result in improved products, reduced costs or better working conditions, but they all have one thing in common—each contributes to the stability and soundness of the business."

★ ★ ★

AN EFFORT to determine the needs of area industries and to develop industrial potential and employment has been undertaken by the Stamford-Greenwich Manufacturers' Council, it has been announced by Malcolm P. Taylor, chairman of the Council.

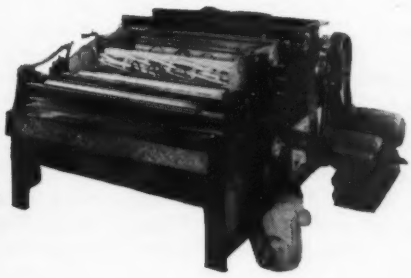
Consideration will be given to expansion needs of certain industries and the problems of re-employment of workers. The Executive Committee of the Council has approved a four-point program of positive action in exploring industry problems. This program will include four major elements:

A survey of local companies will be made in order to determine their needs for more plant space and to disclose whether or not other industries are outgrowing their facilities and are unable to find adequate accommodations in Stamford.

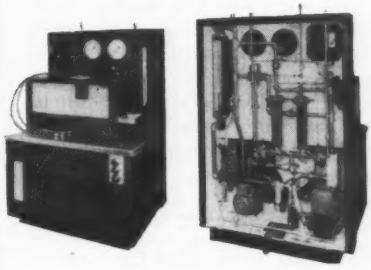
A program of full employment will be undertaken and every effort made

LOOK TO **FULLER BRUSH** FOR

SPECIAL BRUSHING MACHINES



TEST RIGS FOR THE AIRCRAFT INDUSTRY



BRUSHING LATHES

POWER BRUSHES

Here at Fuller we have solved unusual brushing problems for the glass, laminated plastic, strip metal, paper processing, automotive, and many other industries. Special machines, designed and built by Fuller, are instrumental in stepping up production and cutting down expensive hand operations in a wide variety of plants.

In addition, our close association with many testing projects has made us a natural partner for the aircraft industry in the development of special new test rigs.

With extensive engineering as well as machine-building facilities we are well equipped to tackle *your* problem. Simply send it to . . .

MACHINE DIVISION

THE FULLER BRUSH COMPANY, 3616 MAIN STREET, HARTFORD 15, CONN.

to work with member companies in the placement of the unemployed.

The Council, in cooperation with the Chamber of Commerce, will do everything possible to attract new industries to occupy plant space that is now vacant, and will also continue to procure and assist new companies which are attracted to the community.

A special committee will be appointed to explore factors vital to industrial development and operations. The committee will undertake a study of area taxes and will make a comparison of taxes in other communities comparable to Stamford. The committee will also study the apportionment of land now available for industrial use, uses being made of industrially zoned land, and the zoning regulations that apply to industry.

The Acme Wire Co.
Fifty Electrifying Years

(Continued from page 9)

fighter planes. Acme produced many other coil windings which were vital to war equipment such as the coils for the electrically fired bazooka and certain coils used by the Navy in torpedoes.

Shortly after World War II Acme introduced a molding process for treating coil windings that has revolutionized this branch of the industry. This is known as the "ACME-MOLD" process whereby coils are completely impregnated and externally covered with special 100% solid insulating compounds of Acme's own development. ACME-MOLD coils have superior performance, operating life and constant uniformity of dimensions. Several million ACME-MOLD coils have already been produced.

Today the quality of Acme coil windings and the services of Acme's expert coil technicians is well-known in the electrical industry. Every year millions of windings are sold for automotive spark coil replacement, magnetos for small auxiliary gasoline engines which drive such things as power lawn mowers, outboard motors and lighting plants, transformers for oil burners and Neon signs, electric valves for washing machines and soft drink dispensers, solenoids for electrically operated circuit breakers, switches and motor starters. These are just a few of the many applications for coil windings.

VARNISHED INSULATIONS. In 1921, the manufacture of another Acme product was begun, namely, varnished electrical insulations and varnished cambric cable tape. The use of motors and appliances had been increasing steadily and had created an increasing demand for varnished cotton cloth or cambric, varnished silk and varnished paper, which were and still are used in these appliances as insulation. Varnished cambric slit into tape, was being used in growing quantities as insulation for larger power cables. The baked varnish films which are put on in a multiple number of coats in a continuous process are excellent insulators and withstand high voltages. Varnished paper one thousandth of an inch thick, for example, will withstand approximately two thousand volts. Papers as thin as five ten-thousandths of an inch thick are coated with varnish and one of the heaviest materials normally coated is

canvas, forty-two thousandth of an inch thick. When Fibreglas cloth became available, rolls of this material also were coated with varnish. This is an important product which is used as electrical insulation where the electrical equipment is to be subjected to unusual heat.

ELECTRICAL INSULATING VARNISHES AND COMPOUNDS. Acme had been producing its own insulating varnishes for many years and from the experience thereby gained, decided in 1946 to offer its complete line of electrical insulating varnishes to the electrical manufacturers. Large quantities of varnishes are used by electrical manufacturers in treating the windings of electrical equipment. It is a specialized field and today Acme offers its customers an extremely wide variety of high quality electrical insulating varnishes of several different types and grades.

Acme also produces and markets the special insulating compounds mentioned in connection with ACME-MOLD coils. This remarkable product is the result of a long range development program which began long before World War II. The culmination of this research is Acme's present line of impregnating and potting compounds. These are solidified and cured by the application of heat and in their cured form can be varied from a soft, resilient or sticky condition to one that is nearly as hard as glass. Available, also, are low exotherm, room temperature curing mixtures or heat reactive materials with excellent sealing and bonding qualities. These products are known as various mixtures of Acme Star Compound. They are not cut with thinners but are 100% solids and so the interior of coil windings can be filled completely, leaving no voids or air pockets. In the same operation a tough layer of compound is formed around the exterior of the winding which provides complete protection.

Coils treated with Acme Star Compounds are ideal for operation under adverse conditions such as in mines where considerable moisture and, at times, even acids are encountered under unusual hot or cold conditions. Spark coils treated with Acme compounds, but without any other protection, have operated after continuous immersion in water for three years. Certain compounds will not crack after being heated at 212° F. for one hour and then cooled immediately to minus

100° F. for one hour, with this cycle being repeated five times. Acme Star Compound has passed the very rigid tests of the various branches of the Armed Forces covering compounds for treatment of military electronic components. Compounds have now been developed for operation at 300° F. Coils treated by regular methods could not possibly stand up under such operating conditions. The use of Acme compounds for treating various coils and transformers has therefore spread tremendously in a short time and is continuing to grow rapidly.

Sales Organization

Although The Acme Wire Company's products are allied as far as usage is concerned, they differ in many ways—method of production, application by customer, pricing, etc. They are all highly specialized. To give their customers the prompt and efficient service they deserve, Company engineers and sales personnel must have considerable technical training and experience. Since each product has its own peculiar situation, there is an individual sales manager at sales headquarters in New Haven who has responsibility for each product and who handles matters pertaining to it with customers and sales offices. As far as distribution and customer service are concerned, one might say that each is a separate business or division.

Acme's sales offices are located in the centers of electrical manufacturing areas. From these offices salesmen and representatives cover their territories, calling upon customers and prospects. Some are company employees and others are Manufacturers' Agents who sell for more than one company, and represent several non-competing products. Certain sections of the country have a heavy concentration of electrical manufacturers. To serve properly the users of all Acme products in these sections requires the complete time of the salesmen. It is in these areas that direct employees are used.

In other sections, the electrical manufacturers are on the whole larger and fewer in number and the salesman can usually handle such a territory for more than one company. In such areas Acme uses Manufacturers' Agents.

Due to the nature of its products, which are semi-finished raw materials, direct sales to the Government for defense purposes have been comparatively small. Such contracts as are received are usually negotiated by the New Haven Office directly with the Armed Services branch involved.

There are three groups to whom the Company's service has always been dedicated—its Customers, its Stockholders and its Employees. The success attained with these groups is the measure of the Company's success.

To its Customers—many of whom have been with the Company for much of its history—it has dedicated its efforts to maintain standards of dependable high quality, to deliver products when they are needed and at fair prices.

The continued confidence of Acme's Stockholders has been an essential element of its success. These thrifty people who have invested their savings and who own the Company are entitled to a fair return upon their investment. It has always been the Company's aim to so conduct its affairs in a sound conservative manner in order that they may receive the dividends to which they are entitled.

To its Employees—the Company's greatest single asset—it has dedicated its efforts to provide the steadiest possible employment and to add as much as possible to their future security. Acme management wants their work to be done under the best possible working conditions. Fairness is considered essential. An interest is taken in personal problems. The happiness and pride of workmanship by Employees is considered vital to Acme's success.

Acme's dedication in the years ahead will continue to be to Customers, Stockholders, and Employees.

On Their Way . . . . and Moving in the Right Direction

What happens to our young people after they finish high school? Are they getting all the help they need to choose the right vocation—the proper college course?

Do they feel that the most fertile pastures are in Connecticut, or that the grass is greener elsewhere? Do they know what future our industries can hold for them?

Throughout Connecticut, sophomores in our high schools are receiving constructive help in making a career choice, through study and discussion of a new guidance booklet, "There's A Career For You In Connecticut Industry".

In it, men and women in Connecticut plants describe their particular fields— the training needed, the duties performed, the rewards. Right now, when sophomores are deciding their future study courses, this publication has particular guidance value.

The four electric companies sponsoring this publication take pride in sharing a place in this vital effort of helping to direct Connecticut youth toward a promising future. Connecticut's *tomorrow* depends so strongly on the preparedness of Connecticut's youth *today*.

THE CONNECTICUT LIGHT AND POWER COMPANY
THE CONNECTICUT POWER COMPANY
THE HARTFORD ELECTRIC LIGHT COMPANY
THE UNITED ILLUMINATING COMPANY

PUBLIC RELATIONS

BY A. F. KACYNSKI

Public Relations Director

Communication of Ideas

To deal with people requires the communication of ideas. This is a two-way project. The executive cannot possibly put across his ideas unless he knows what ideas are already in the minds of his workers—ideas which may clarify or confuse, help or hinder. Workers must understand what management is trying to do before they can be counted upon for enthusiastic support.

This means that management must have crystal-clear in its own mind just what is to be atempted, or the results will be confusion and frustration. Napoleon wrote to one of his generals: "You will so manage that the Spaniards may not suspect the course I intend to pursue. This will not be difficult, for I have not fixed upon it myself."

★ ★ ★

Four Virtues

There are many virtues, but four are of leading importance to the person seeking to live and work successfully with people. They are consistency, sincerity, courtesy and friendliness.

Leadership has been written about for thousands of years, and scores of books are published every year giving advice about how to become and remain an executive. Yet in all these years and wordy advice no substitute has been found for these four virtues: Consistency, sincerity, courtesy and friendliness.

★ ★ ★

One Thing Leads To Another

When a new manufacturing plant opens there is a net addition to income flow in the community. The new payroll dollars roll into the cash registers of the local merchants, into the coffers of the banks, and the economy expands

Usually, this expansion is reflected in general community growth with increases in population, school enrollment, and all the rest. A recent study of the effect of industrialization in counties in different states over a ten-year period brought out these findings:

An increase of 100 factory jobs created 74 jobs in other lines of work; 112 more households were established; 296 persons were added to the population; 107 new car registrations were reported; 70 new telephones were installed; 4 new retail firms were set up; retail sales increased $360,000 a year; personal income increased $590,000; bank deposits rose by $270,000.

This is an aspect of community development that is not fully appreciated, yet it is the essence of economic health and growth. When telling the business story, manufacturers could improve their community public relations if this kind of graphic information was known about their own community.

★ ★ ★

Telling the Business Story

Employees rate employee letters near or at the top of the scale in popularity and acceptance. Popularity and acceptance, however, will coincide roughly with the regularity with which letters are received, the candor with which they discuss issues, and the level of management from which they originate. Employee letters are relatively inexpensive and can be used by any size or type of business as an excellent communication medium. Employers can step-up their public relations efforts through this means of communication both to their employees and in the community in which they operate in telling their business story.

"I gain 2 hours a day"...so can you!

When Joe was home or on the road, he'd work till late at night • To write out all his letters, orders, memos—what a fight it was, till Hal, his lawyer friend, said, "Try instant dictation • With Dictaphone TIME-MASTER*—best machine in all the nation.

"Pick up a mike and think aloud." Joe did—and bought TIME-MASTER • Now he uses it everywhere—works better, easier, faster • And once work's said, he knows it's *right*, 'cause typists can't mistake his words on *Dictabelt*, the plastic record that can't break.

He mails the belts just like a letter. They're feather-light and clear • The office listens to reports without phone tolls to fear • Dictaphone TIME-MASTER saves so much in work and dough • The boss equipped all of his staff to communicate like Joe.

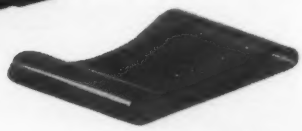
So that's how Joe gets more work done—and gains two hours a day • Plus money, too. And so will you. We'll prove that it will pay for *you* to use TIME-MASTER in most any job you fill • Take a free desk trial—and start to make the most of *all* your skill.

*The complete name is the Dictaphone TIME-MASTER Dictating Machine.

DICTAPHONE...FIRST IN SALES AND SERVICE OF DICTATING MACHINES THE WORLD AROUND

Try the Dictaphone TIME-MASTER Dictating Machine on *your* job. Just call or write your local Dictaphone sales and service representative. Or write Dictaphone, Dept. 00, 420 Lexington Avenue, New York 17, N. Y.

The plastic *Dictabelt* record—unbreakable, mailable, filable and exclusively Dictaphone's.



DICTAPHONE TIME-MASTER DICTATING MACHINE

Industry Forums Tell Community A Story

The West Torrington Men's Club Industrial Forum uses a little dramatics to tell the local industry story. Movies of local plants and employees of firms are shown as a representative of a firm speaks on the company's products and its past, present and future. Firms who have appeared on previous forums are the American Brass Co., Warrenton Woolen Mill; Colonial Bronze Co. and the Torrington Co. Scheduled to tell its story in February was the Haydon Manufacturing Co.

★ ★ ★

Step Right Up To Be Counted

Members of the Administrative Committee of General Electric in Bridgeport reported that GE employees gave a sum of $35,366 to the Community Fund because they had the facts first. Convinced by the evidence of need, GE employees stepped right up to be counted. Sixty percent of all employees increased their individual contributions. More than 100 new members joined, bringing total participation to 87.3 per cent, the highest since the one-for-all plan for giving was established.

★ ★ ★

Business Beware

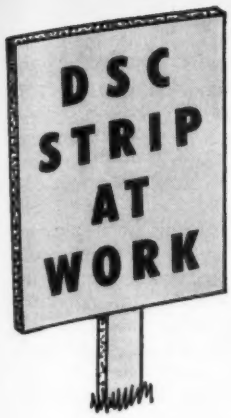
Elmo Roper conducted a survey six years ago to find out which groups were thought to be doing the most good for the nation—religious, business, government, congressional or labor. Business got 20 per cent of the votes, second only to the religious category (34 percent). But when Roper ran the same survey last year, business had slumped from 20 per cent to 10 per cent, while the religious groups rose to 40 per cent and government jumped from 11 per cent to 18 per cent. On the question of who was doing the least for the country, business, which received only 6 per cent of the votes in 1948, got 9 per cent in 1953.

So the time has come for business to do something effective to reverse the trend of growing antagonism. Business, which can so successfully apply the physical sciences to problems, must recognize the worth of social sciences as well. By the efficient application by industry of the specialized skills of engineers, scientists and researchers, Americans enjoy the highest material living standards of any nation. But until industry uses the skills of public relations with equal efficiency to interpret the role of industry as the real social worker in our midst, it will continue to be the unpopular "whipping boy" in the mind of the general public.

★ ★ ★

Announcing Employee Retirements

To give longer life to announcements of employee retirements, why not try the plant bulletin board preceding their publication in the employee magazine. The aim is to distribute in advance of the magazine more information about the employee. Each month companies can feature on their bulletin boards a picture and biography of an employee scheduled to retire in the coming year.



(ACTUAL EXAMPLE)

THE PART

Chrome Plated
Auto Grille Unit

THE STEEL

218,000 lbs. 21" x .036"—Soft Temper, No. 2 Reg. Bright Finish

BLANK SIZE, 21" wide x 36" long

PRINCIPAL OPERATIONS

Blank, Draw, Restrike and Trim
THE JOB-RUN....27175 pieces
THE YIELD.....27055 pieces
THE TIME.....February 1955

JOB PERFORMANCE 99 56/100 %

In citing this one example, we're not saying that DSC STRIP will give you the same near-perfect performance every *time*. We do say that over the long run, our product consistently meets or beats established standards for strip performance.

We invite you to test our 33 years of successful stripmaking experience. We know what our product can be expected to do when the tools, the job and the steel are properly mated.

Let's talk over some of YOUR nearby requirements. Just call your nearest DSC Customer Representative.

DETROIT STEEL CORPORATION

GENERAL SALES OFFICE — DETROIT 9, MICHIGAN

DSC CUSTOMER REPRESENTATIVE OFFICES

Chicago, Cincinnati, Columbus, O., Dayton, O., Detroit, Grand Rapids, Mich., Hamden (New Haven), Conn., Indianapolis, Jackson, Mich., Louisville, Ky., New York, Richmond, Va., St. Louis, Toledo, Worcester, Mass.

YOUR GUIDE TO DSC MILL PRODUCTS

Hot Rolled and Cold Rolled Sheets
Cold Rolled and Hot Rolled Carbon Steel Strip
Cold Rolled High Carbon Spring Steel
Low and Medium Carbon Manufacturers' Wire
High Carbon Specialty Wire
Aluminum Cable Strand Reinforcement
Rope Wire Tire Bead Wire Welded Fabric

How RELIANCE *Job-Fitting* meets your requirements

Like our mill people, we in Reliance also work to supply steel that meets your job requirements.

The difference is this. Our mill people *make* the steel to your order. We *pick-your-order* from ready-made sheet and strip. For all practical purposes, the results must be about the same.

How do we meet the test? By getting the facts about the job . . . knowing from experience what the steel on hand can and cannot be expected to do . . . selecting what's best suited for your job in gauge, size, workability and finish.

That's *Job-Fitting*—The Reliance way.

Try us. Call your nearest Reliance Customer Representative whenever we can be useful.

T.M. REG. U.S. AND CANADA
DEPENDABLE DAN

RELIANCE STEEL

DIV. DETROIT STEEL CORPORATION

Processing and Distributing Plants

CLEVELAND PLANT, Cleveland 27, O. VUlcan 3-3600
DETROIT PLANT, Detroit 28, Mich..WEbster 3-5866
EASTERN PLANT, Hamden, Conn.....STate 7-5781
MIDWEST PLANT, Chicago 8, Ill.....CAnal 6-2442

Reliance Customer Representative Offices

Dayton, O., Des Moines, Ia., Grand Rapids, Mich., Indianapolis, Ind., Jackson, Mich., Milwaukee, Wis., New York, N. Y., St. Louis, Mo., Toledo, O., Worcester, Mass.

RELIANCE *Job-Fitted* PRODUCTS

COLD ROLLED STRIP — Coils Cut Lengths All Tempers
SHEETS — Cold Rolled Hot Rolled Pickled
Galvanized Long Terne

Standard or Production Sizes
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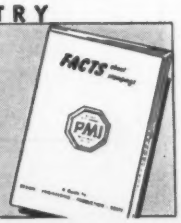


TRANSPORTATION

By EDWARD M. MAMULSKI
Traffic Manager

Sea-Land Transport Service Proposed

THE McLean Trucking Company filed an application with the Interstate Commerce Commission seeking approval for the establishment of a coordinated land and water system of transporting truck trailers on specially designed ships to operate between ports on the Atlantic seaboard. Under this proposal McLean plans to merge with S. C. Loveland Co., Inc., a steamship and tug-and-barge water carrier of Philadelphia, Pa.

The ports of Wilmington, N. C., or Charleston, S. C. and New York City and Providence, R. I. are being considered for the initial service. If permission is granted by the Commission and should business conditions warrant additional service, other terminals under consideration are: Jacksonville, Fla., Philadelphia, Pa., and Newark, N. J.

A 33-hour schedule between Wilmington, N. C., or Charleston, S. C., and New York City is planned. It will require about 7 hours additional time to reach the port of Providence, R. I. from New York City.

To the shipping public this would mean a lower cost land-water transportation service and a door-to-door motor freight service. Delays of loading or unloading in the port areas would be greatly lessened because the entire trailer would be handled from the ship at one time. It is estimated that about 240 trailers could be unloaded in about 4 hours as compared to 60 hours for the normal unloading time of regular cargo from the conventional coastwise vessel which has five hatches and a capacity of about 5,000 tons.

The decline in coastwise commerce after World War II is due largely to the great increase in terminal costs of water carriers. The proposed service would mean less out of pocket costs for handling cargo at the port areas and less time in port for the vessels which should ultimately result in considerable savings to the operators.

McLean may publish separate tariffs of rates and charges covering the land-water service. Under the proposed land-sea operation McLean would participate in joint through rates and make this same arrangement available to competing motor carriers.

If this proposal is approved by the Commission McLean plans to purchase four specially designed ships from the Bethlehem Steel Company at an estimated cost of 8½ million dollars each. These ships would be about 650 feet long, would carry about 240 trailers, and be capable of a speed of 20 knots per hour. Each ship would have two enclosed trailer decks for loading or unloading trailers which could be accomplished simultaneously by using a double deck adjustable loading ramp. The vessels would carry about 3,500 net tons of payload cargo.

The construction of terminal facilities to accommodate up to 1,000 trailers for the principal terminal areas is contemplated. On November 2, 1954, the voters of Providence, R.I. approved a $2-million dollar bond issue for the financing of terminal and other facilities for the sea-trailer service. A terminal including a double deck loading ramp and other port facilities would be built by the city of Providence. Under this plan the city of Providence would lease the facilities to the McLean Trucking Company.

Hearings relative to this proposal began in May, 1954, and were concluded in October of the same year. Approximately 130 witnesses appeared on behalf of the McLean interests, most of whom were shippers from along the Atlantic seaboard.

The Secretary of Agriculture, The Federal Maritime Board, the Department of Defense, the Port of New York Authority, the Shippers Conference of greater New York, the Jacksonville Traffic Bureau, the Chamber of Commerce of Charleston, S. C., and many others favored this proposal.

Representative Chatham of North Carolina said that McLean should be "publicly commended for the vision, courage and sound planning that have been displayed in the presentation of its land-sea system of transportation for the improvement of service to the public, to the government, and to the country."

About twenty nine railroads and several trucking companies objected to this proposal.

The McLean Trucking Company was founded in 1934 by Malcolm P. McLean. They have 37 terminals extending from Boston, Mass., to Atlanta, Ga. At the present time they are conducting highway operations in the following states and the District of Columbia; Conn., Del., Ga., Md., Mass.,

N.J., N.Y., N.C., Pa., R.I., S.C., and Va. Under the proposed arrangement shippers would have their choice of routing shipments over the faster land service routes or the slower land-sea routes.

McLean is awaiting the Commission's decision before authorizing the construction of ships and the necessary port facilities.

Birthday for Cellu-san

(Continued from page 10)

city tests conducted by an independent biochemical laboratory showed Cellu-san to be absolutely safe to use. The practical considerations of applying Cellu-san and handling treated containers were exceptionally favorable in all respects since it can be dipped, sprayed or brushed, and is available as a liquid concentrate which can be diluted right at the treating site. Many packers have reported success in applying Cellu-san to viner canvas which is used in hulling operations in the field. The treated canvas stays cleaner, free from sludge and litter, prevents breakdowns during harvesting, and greatly reduces end-of-season maintenance.

Recognition and Growth

Ample time has elapsed since all of these tests were conducted for the product to prove its worth under actual conditions in the field. Under the guidance of Frederick D. Houghton, Manager, extraordinary progress has been made in developing sales so that today, the country's leading canners, growers and packers . . . Heinz, Campbell's, Hunt, Libby's, Snow Crop, Pictsweet, B & M, and Seabrook Farms, to name just a few . . . use Cellu-san treated field boxes, hampers and baskets.

Endorsed highly by The National Wooden Box Association, Cellu-san's uses have expanded to acceptance for the treatment of any wooden containers used in the handling or warehousing of odor and mildew-sensitive materials. Broader uses for Cellu-san are being found among dairies, bottlers, brewers, manufacturers, pallet manufacturers and industrial engineers.

With a national advertising program reaching box manufacturers, canners, packers, growers through trade paper advertising and direct mail, the signs point to an even bigger and better future for this new Connecticut product manufactured by one of the state's oldest companies.

PUSH-BUTTON BANDAGE

It's a miracle of modern medicine — a spray-on plastic dressing in a push-button aerosol bomb. Tough, transparent, flexible — fast and easy to apply — it's the last word in convenience and efficiency.

In the field of insurance, too, there's a modern, highly efficient way to fit the protection of business and industrial concerns exactly to each firm's individual requirements. It's the Ætna Plan — pioneer system of risk and insurance analysis.

Using this advanced Plan, your Ætna representative can pin-point the hazards to which you are exposed — fit policies precisely to your particular needs — and set up continuing controls that will keep your program always up-to-date.

Let your local Ætna representative put this effective, modern plan to work for *your* business. The Ætna Plan has meant better protection for thousands of others — it can do the same for you.

There's a modern way in insurance, too—

Ætna Plan protection means better protection

ÆTNA CASUALTY AND SURETY COMPANY

AFFILIATED COMPANIES: ÆTNA LIFE INSURANCE COMPANY

AUTOMOBILE INSURANCE COMPANY • STANDARD FIRE INSURANCE COMPANY

HARTFORD 15, CONNECTICUT

ACCOUNTING HINTS

Contributed by the Waterbury Chapter National Association of Cost Accountants to stimulate the use of better accounting techniques in industry.

Cost Reports

COST accounting must present to the executive the fair, complete costs of his units of production; it must tell of the use and waste of materials; it must illustrate in operation and in groups, the productivity of labor; it must present values and returns, in units and by divisions, of his expenses and their relation to labor operations and sales; it must show the relation of sales to production, and of changing situations as may be desired, and, in addition, it must be used to show the comparative value of different methods. It must do all these things with a minimum of time and exertion on the part of the executive; for too much accounting system, too many figures, defeat the real purpose of cost accounting.

The trouble with most cost systems is that they are designed for cost accountants instead of the operators of the business. While certain principles of accounting and auditing should be maintained, the primary purpose is to provide useful information to the operating men in the business. It is important then, to remember to design a cost system from reports that will be useful to operators and to work back from these reports in the installation of the system.

Department heads such as foremen and junior executives should be concerned with details of everyday operations and reports submitted to them should be detailed in character and should emphasize cost control. These men are concerned with the expenditure of labor, material and overhead. The executive within this group is entitled to as much service from the cost department as a higher official.

General executives include those who have supervision over and responsibility for functions exercised on a plant wide scale. These men exert their influence on costs and operating results through organization, direction and inspiration of their subordinates.

Instead of merely collecting figures, a purely clerical task, the cost accountant is required to digest the significance of facts compiled, and to arrange them in a way that enables the executive to take whatever action the situation demands. When cost accounting is limited to cost collecting, the executive must work through all the details to sort out the irrelevant from the significant material.

Good cost reports should be judged on economy of time and effort, physical make up, timeliness and content.

Economy of time and effort. The *principle of exceptions* may be used to eliminate those items that do not need study or action. Management needs vivid information and less detail. This means that the executive should receive a summary that gives him a birdseye view of conditions with a minimum of time and a maximum of speed.

Physical make-up. The title should clearly describe the report. Brevity is desired but should not be favored at the expense of clarity. The period covered should be clearly indicated. The subject matter should be suited to the person who is receiving the report. Advanced statistical techniques should be employed only where the reader clearly understands the implications and assumptions. For example, logarithmic charts and semilogarithmic charts should only be used for persons who understand their use. The summary should be presented first but detail supporting information should be readily available.

Timeliness. Production executives need information while the work is be-

ing performed in order to correct conditions that may have gone out of control. Routine reports must be submitted at regular intervals and where condition warrant, such as the danger of high spoilage, daily reports should be instituted.

Content. Emphasis must be placed on the items which are most important. In some businesses, labor is the most controllable and the largest element of cost whereas in some process industries material usage and quality is stressed. Reports must be comparable with previous reports. In general, the items that are controllable by an executive should be emphasized in the report that he receives.

These are but a few of the considerations in evaluating the expense of supporting a cost department. While many modern companies have taken effective action in obtaining adequate records and presenting timely reports, many companies have not exploited the information that is compiled in the accounting department. Without a doubt, many of these companies would be able to cut their costs immensely by the simple process of creating a cost system that is primarily a service to furnish information to the executives at all levels for the effective control of men, materials and machines.

A Student Reports On NAM Congress

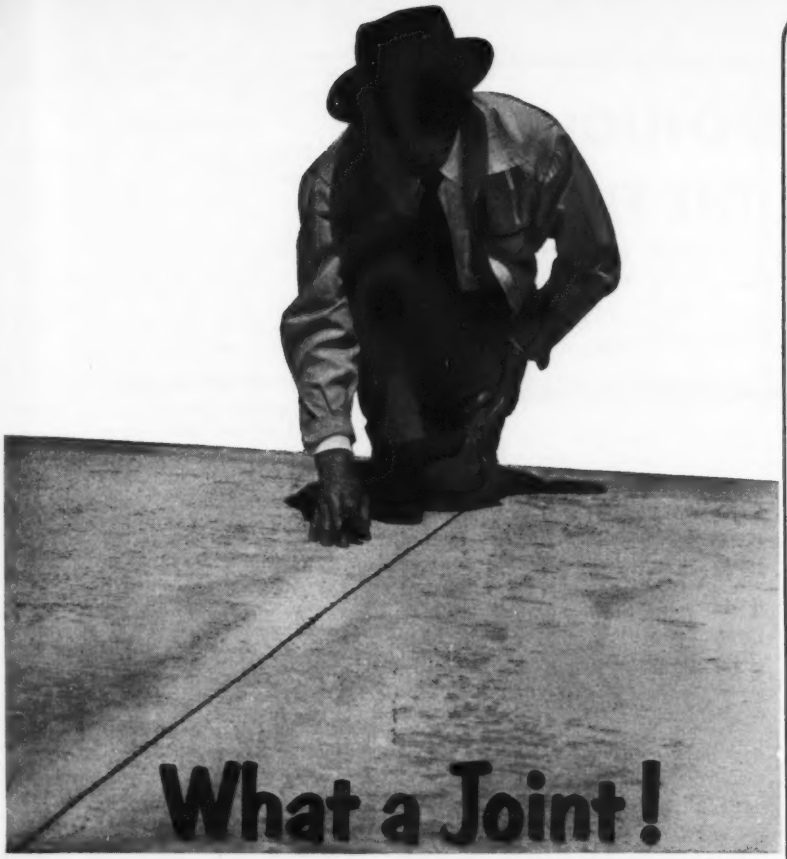
(Continued from page 13)

important that the advantages of stronger competition, safer and better working conditions, and greater productivity, which are brought about by automation, be thoroughly explained. In this way, industry will gain support from its employees and the community in a movement which might otherwise be a difficult situation.

The responsibility then is that of industry. They must provide the country with a high level of productivity and at the same time, they must be certain that what they do is fully understood and accepted by the public. From what I saw and heard at the convention, I doubt if there is too much we have to fear from decisions arrived at by industry.

Although the 59th Congress of Industry is now over, the task of the individual student and apprentice present at the convention is just beginning. While at the Congress of Industry, we heard many ideas and opinions. It is up to us to weigh the policies set forth and to make our own decisions concerning industry and its relationship to the other sectors of the economy.

In conclusion, I would like to express my thanks to the National Association of Manufacturers, Quinnipiac College, and to the Manufacturers Association of Connecticut for making it possible for me to have become a part of such an event. It was an honor, a privilege and an experience to be remembered.



it's real smooth on modern concrete roads

The engineers who built the concrete roads that pulled America out of the mud more than a generation ago thought joints had to be wide and frequent to permit expansion and contraction of the concrete slabs. Most of those roads built 30 to 40 years ago are still serving, too, but they're as different from modern concrete roads as the Model T is from today's automobiles.

Years of experience and experiment have brought steady improvements in jointing. Now engineers have found a new method of making joints in concrete pavement that has highway circles excited. After the concrete hardens they *saw* a thin groove, usually only ⅛ inch wide, across the slab. Then they seal the slot with a plastic material that can't be squeezed out.

Talk about joints! If you didn't see them you wouldn't know they were there. They're that smooth.

Improvements like this don't just happen. They result from painstaking research by many organizations, including the Portland Cement Association. Finding ways to give highway users even safer, more durable and lower-annual-cost concrete roads for their tax dollars is a job to which the PCA is dedicated.

The voluntary financial support of member companies, listed at the right, makes this and all other PCA activities possible.

PORTLAND CEMENT ASSOCIATION
250 Park Avenue, New York 17, N. Y.

A national organization to improve and extend the uses of portland cement and concrete through scientific research and engineering field work

PORTLAND CEMENT ASSOCIATION MEMBER COMPANIES

Aetna Portland Cement Co., *Bay City, Mich.*
Allentown Portland Cement Co., *Catasauqua, Pa.*
Alpha Portland Cement Co., *Easton, Pa.*
Arizona Portland Cement Co., *Rillito, Ariz.*
Ash Grove Lime & Portland Cement Co., *Kansas City*
The Bessemer Limestone & Cement Co., *Youngstown*
British Columbia Cement Co., Ltd., *Victoria, B. C.*
California Portland Cement Co., *Los Angeles*
Canada Cement Co., Ltd., *Montreal*
Consolidated Cement Corp., *Chicago*
  Kansas Division, *Fredonia*
  Michigan Division, *Jackson*
Coplay Cement Manufacturing Co., *Coplay, Pa.*
Cumberland Portland Cement Co., *Chattanooga*
Dewey Portland Cement Co., *Kansas City*
The Diamond Portland Cement Co., *Middle Branch, Ohio*
Dragon Cement Co., Inc., *New York*
Federal Portland Cement Co., Inc., *Buffalo*
General Portland Cement Co., *Chicago*
  Florida Division, *Tampa*
  Signal Mountain Division, *Chattanooga*
  Trinity Division, *Dallas*
The Glens Falls Portland Cement Co., *Glens Falls, N.Y.*
Green Bay Cement Division, Pittsburgh Coke and Chemical Co., *Pittsburgh*
Hawkeye-Marquette Cement Co., *Des Moines*
Hercules Cement Corp., *Philadelphia*
Hermitage Portland Cement Co., *Nashville*
Huron Portland Cement Co., *Detroit*
Ideal Cement Co. Divisions, *Denver*
  Alabama Division, *Mobile*
  Arkansas Division, *Little Rock*
  Colorado Division, *Denver*
  Gulf Division, *Houston*
  Louisiana Division, *New Orleans*
  Nebraska Division, *Omaha*
  Oklahoma Division, *Oklahoma City*
  Spokane Division, *Spokane*
  Three Forks Division, *Butte, Mont.*
  Union Portland Division, *Salt Lake City*
Keystone Portland Cement Co., *Philadelphia*
Kosmos Portland Cement Co., *Louisville*
Lehigh Portland Cement Co., *Allentown, Pa.*
Lone Star Cement Corp., *New York*
Longhorn Portland Cement Co., *San Antonio*
Louisville Cement Co., *Louisville*
Manitowoc Portland Cement Co., *Manitowoc, Wis.*
Marquette Cement Manufacturing Co., *Chicago*
Medusa Portland Cement Co., *Cleveland*
The Missouri Portland Cement Co., *St. Louis*
The Monarch Cement Co., *Humboldt, Kan.*
Monolith Portland Cement Co., *Los Angeles*
Monolith Portland Midwest Co., *Los Angeles*
National Cement Co., *Birmingham*
National Portland Cement Co., *Philadelphia*
Nazareth Cement Co., *Nazareth, Pa.*
North American Cement Corp., *New York*
Northwestern Portland Cement Co., *Seattle*
Northwestern States Portland Cement Co., *Mason City, Iowa*
The Olympic Portland Cement Co., Ltd., *Seattle*
Peerless Cement Corp., *Detroit*
Penn-Dixie Cement Corp., *New York*
Petoskey Portland Cement Co., *Petoskey, Mich.*
Pittsburgh Plate Glass Co., Columbia Cement Division, *Zanesville, Ohio*
Riverside Cement Co., *Los Angeles*
San Antonio Portland Cement Co., *San Antonio*
Southern States Portland Cement Co., *Atlanta*
Southwestern Portland Cement Co., *Los Angeles*
The Standard Lime & Stone Co., *Baltimore*
Standard Portland Cement Division, Diamond Alkali Co., *Cleveland*
St. Mary's Cement Co., Ltd., *Toronto*
Superior-Marquette Cement Co., *Portsmouth, Ohio*
Superior Portland Cement, Inc., *Seattle*
Universal Atlas Cement Co., *New York*
Volunteer Portland Cement Co., *Knoxville, Tenn.*
Whitehall Cement Manufacturing Co., *Philadelphia*
Wyandotte Chemicals Corp., *Wyandotte, Mich.*

SPOTLIGHT ON THE FUTURE*

By CHESTER F. OGDEN
Manager of Purchases
Detroit Edison Company
Detroit, Michigan

General Business Conditions

THERE is renewed vigor in the business picture according to Purchasing Executives in their February report. Production continues high, with 43% reporting an increase over last month and 49% the same. Those reporting an increase in new orders (55%) are the greatest since September, 1950. However, the 8% who reported a reduction in production and new orders were most vociferous. They felt strongly that business conditions for the company, or in their area, were not good. The general consensus of all reporting members, though, is that current business conditions are good and there is a comfortable order backlog and high production rate.

Commodity prices have definitely moved upward, in spite of increased competition and discounts on some items. Inventories are balanced and there is strong evidence that Purchasing Agents are unwilling to jeopardize their good inventory position by "second guessing" to protect against strikes or world unrest. With regard to buying policy, there is a definite trend to lengthen coverage just a little. The items being bought further in advance are generally those in short supply or where "bargains" have been available.

Employment remains high, with a shortage of clerical and skilled help. In some areas, there is a surplus of common labor.

Commodity Prices

Prices are up, so say more than half of the reporting Purchasing Agents. This is the largest number reporting increases since February, 1951. The parade of increases was led by basic raw materials such as copper, aluminum and rubber.

Offsetting these increases, however, competition is reported very keen on many manufactured items and on some products; an example is heavy electrical equipment, where the market has been unstable.

Inventories

"Balanced" sums up the general consensus of reporting Purchasing Agents on inventories of purchased materials.

Over 80% of those reporting indicate their inventories are the same or up slightly (to offset increased business) and nearly all are satisfied with their present inventory picture.

Employment

Employment remains at a high level. Scattered reports show some surpluses of unskilled labor, but even most of these look optimistically at a slow but steady pickup in employment as Spring approaches. Skilled technical help and good clerical help are reported in demand in some areas. Of the Purchasing Agents reporting this month, only 8% indicated any drop in their employment figures and these were explained as being normal or of little significance.

Buying Policy

Buying policy is a little less conservative, with 76% of the reporting Purchasing Agents operating in the hand-to-mouth to 60-day range, as compared to 95% last month. There is some scattered evidence of advance coverage on items which are, or may become, short—such as steel and copper. Also, some coverage has been lengthened to take advantage of "good buys" available on certain mechanical and electrical items.

Specific Commodity Changes

Again this month, copper, brass, aluminum and rubber were the items most generally reported as up in price. Coffee, following the recently announced price cuts, was the leader of the three commodities reported down this month.

On the up side were: Copper, brass, brass mill products, bronze castings, nonferrous and ferrous scrap, aluminum, chains, tin, rubber, tires, fine papers, cotton yarn, jute yarn, #6 fuel oil, and lumber.

On the down side were: Coffee, electric motors and some cotton linters.

In short supply: Copper, nickel, prime aluminum, galvanized steel sheets, cold rolled steel sheets, some hot rolled steel sheets and some steel items.

* *Composite opinion of purchasing agents who comprise the N.A.P.A. Business Survey Committee, whose Chairman is Chester F. Ogden, Manager of Purchases, The Detroit Edison Company, Detroit, Michigan.*

BUSINESS TIPS

from

School of Business Administration

University of Connecticut

How To Get The Most Out A Media Salesmen

By ROLAND B. SMITH, Assistant Professor of Advertising
The University of Connecticut

MEDIA salesmen have been called the most valuable river of ideas the space buyer has. This is no over-statement since properly handled a good space salesman can become an assistant advertising manager — without pay. What is needed is for space buyers, and advertising managers, to use the talents and facilities of the space salesman more extensively and more intensively.

Consider what a salesman has to offer. First, he is, or ought to be, a specialist in the market served by his publications. As a specialist he can be the most prolific source of up-to-date, reliable, first-hand information about the markets served by his medium available to advertisers. Second, he is, or ought to be, equally conversant with the relationship of his publication to that market. Third, he can bring to bear on your advertising problems the full resources of his publishing firm—often quite extensive, in gathering market data, testing, merchandising, and sales promotion. He can help plan scheduled; he can help build budgets, media lists, and suggest effective campaign themes.

Being an advertising man, acquainted with his market, he is a useful critic of advertising appeals and copy. Because he gets around, he can enlist salesmen, advertising workers, and other personnel needed by an advertiser. The media salesman can usually assist an agency prepare a presentation by making available market and media data, or assist an advertising manager sell his budget request.

How can the advertiser or agency representative get the most out of a media salesman? Here are some suggestions:

1. Give him full and complete information about your product, your plans and advertising problems so he has a full set of facts with which to work. A salesman has little chance to assist a client if he doesn't know the client's problems or the framework within which the client must work. Don't keep a space salesman in the

dark if you would get the most out of him.

2. Give him an adequate opportunity to tell you his story fully and in detail. This means more than just listening. It includes requiring of the salesman a carefully prepared presentation on your markets and on his medium. It includes having all other interested personnel in your firm on hand to hear this presentation, or at least a summary of it. It includes paying attention to what the salesman has to say. And, it includes asking for evidence and proof of his claims in terms that are comparable to competitive media.

3. Plan his calls with him so that he will be in your office at those times of the year when his information will be of greatest value to you. Encourage appointments. Discourage casual calls. Make clear that you have time only to listen to information, not chit-chat.

4. Don't play him between your office and the agency, or vice versa. Don't ask for special favors that cannot be granted to other advertisers. Don't let him waste his time and your knocking competition, or presenting a negative story. Don't encourage him to violate confidences.

5. Conserve his time—and yours. Don't keep him waiting unnecessarily when he calls. (This is especially important if you have arranged the appointments). Stick to the subject and avoid irrelavancies during the interview. Avoid taking unnecessary phone calls, permitting other interruptions by associates, assistants, etc. Pay attention to him; avoid attending to other matters—have a clear desk. Conserve his time, and yours, by not procrastinating. Make decisions and stick by them. Don't waste his time and yours by avoiding a flat truthful statement if you're not putting his book on your list.

At first glance these suggestions seem to put on the advertiser's shoulders a responsibility for upgrading some space men. That may be true. But nevertheless, it will likely prove true also that by observing these suggestions space men will not only be upgraded but by that means you will be gaining valuable assistance that can be multiplied by the number of salesmen who call on you—an impressive array of stand-buy talent and manpower —for the asking.

The Connecticut "White House" Conference

(Continued from page 12)

ceived of as a life-long process, which included emotional, social, moral and intellectual development."

It was recognized that "there are difficulties in trying to realize this goal," and the group "recommended a joint and continuous effort by all elements in the community in working out the school program. All groups thought that a major task of education today is to improve communication between the specialized educator and the general consumer."

Concerning teachers: "The primary recommendation made was that there should be more public enlightenment of what the profession stands for and what the experience of teaching can give. A greater dissemination of the facts with regard to the teacher shortage is necessary, and an active program of recruitment."

Concerning school buildings: "There was emphasis upon an adequate program and not a minimum program, with flexibility in view of future needs. Due regard should be given to the economical operation of all buildings."

"The long range needs of the town should always be taken into consideration, and strongly recommended was early consultation with an architect regarding design, use of new materials and the like."

Concerning school finance: "At the present time 83% of the expense is met by local sources and 17% through state aid. Can the towns continue or increase their support? It was remarked that the limit to town support has been reached politically but not economically. There were three groups discussing the problem of state aid. Two groups decided in separate meetings that they would vote to recommend a $40-per-pupil state aid at this session of the General Assembly. The third group suggested that operating costs should be met by the State according to the need."

"It was suggested that the present program of state grants for public school buildings be revised to provide $500 for elementary schools, $700 for secondary schools or 1/3 of the cost of the project, whichever is the lesser, excluding land acquisition costs."

In conclusion: "One can only wish that all members of faculties in Connecticut schools might have taken part in this conference, for it would have encouraged them to know of the public interest in the problems which they daily face. On the other hand, it would have been a heartening experience for all parents to sit down with teachers and educators, as we have done at this conference, and see their understanding and their desire to do the best thing for each child."

A further word—"The White House Conference itself will be a study conference. It is important to keep in mind in this connection that education is a matter for the states and for local authorities, and that action can be taken in the State of Connecticut by our General Assembly and by our local boards.

CONNECTICUT ADVERTISING SERVICES

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Established 1934

Advertising

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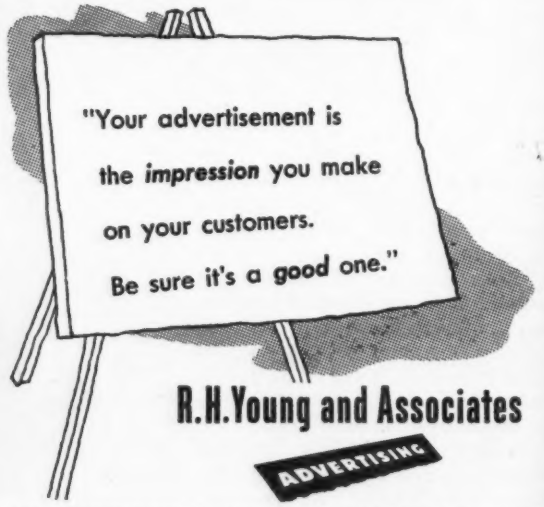

R.H. Young and Associates

ADVERTISING

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IT'S MADE IN CONNECTICUT

EDITOR'S NOTE: This department, giving a partial list of peace-time products manufactured in Connecticut by company, seeks to facilitate contacts between prospective purchasers in domestic or foreign markets and producers. It includes only those listings purchased by Connecticut manufacturers. Interested buyers may secure further information by writing this department. Connecticut manufacturers desiring to list their products in this department should write the Editor for listing rates.

(Advertisement)

Accounting Forms
Baker-Goodyear Co The — New Haven

Accounting Machines
Underwood Corporation — Bridgeport

Adding Machines
Underwood Corporation — Bridgeport

Advertising Mats
Lockwood Sons Inc Wm H — Hartford

Advertising Plates
Lockwood Sons Inc Wm H — Hartford

Advertising Specialties
H C Cook Co The 32 Beaver St — Ansonia
Halco Co — New Haven

Air Compressors
Spencer Turbine Co The — Hartford

Air Conditioning
Norwalk Airconditioning Corp The (forced air heating units oil fired) — South Norwalk

Air Impellers
The Torrington Manufacturing Co — Torrington

Aircraft
Sikorsky Aircraft Division United Aircraft Corporation (helicopters) — Bridgeport

Aircraft Accessories
Chandler Evans Div Niles-Bement-Pond Co (Piston and Jet Engine Accessories—Carburetors, Fuel Controls, Afterburner Regulators, Pumps, Servomechanisms and Protek Plugs) — West Hartford
Fenn Mfg Co The (Hardened and Ground Gears assemblies) — Newington
Gabb Special Products Div E Horton & Son Company (filler caps—pressure fuel servicing systems) — Windsor Locks
Hamilton Standard Div United Aircraft Corp (propellors and other aircraft equipment) — Windsor Locks
Manning Maxwell & Moore Inc (aircraft pressure switches and jet engine afterburner control systems) — Stratford
Russell Manufacturing Company The (CAA approved safety belts; webbing and hardware for safety belts; shock rings and shock cord; ring and cord hardware; webbing for all aircraft applications) — Middletown

Aircraft Instruments
Gorn Electric Company Inc — Stamford

Aircraft—Repair & Overhaul
Airport Department Pratt & Whitney Aircraft Division — Rentschler Field East Hartford

Aircraft Test Equipment
United Manufacturing Co Division of The W L Maxson Corp — Hamden

Air Ducts
Wiremold Co The (Retractable) — Hartford

Air Heaters—Direct Fired
Peabody Engineering Corporation — Stamford

Aluminum Bronze Castings
Knapp Foundry Company Inc — Guilford

Aluminum Castings
Consolidated Industries Inc — West Cheshire
Eastern Malleable Iron Company The — Naugatuck
Newton-New Haven Co 688 Third Avenue — West Haven
Charles Parker Company The — Meriden
Stamford Casting Company Inc (Aluminum, Magnesium and Bronze) — Stamford

Aluminum Forgings
Consolidated Industries Inc — West Cheshire
Scovill Manufacturing Company — Waterbury 91

Aluminum Ingots
Lapides Metals Corp — New Haven

Aluminum Lasts
United States Rubber Company Shoe Hardware Division — Waterbury

Aluminum—Sheets & Coils
United Smelting & Aluminum Co Inc — New Haven

Ammunition
Remington Arms Co Inc and Peters Cartridge Div — Bridgeport
Winchester Repeating Arms Company Division Olin Industries Inc — New Haven

Anodizing
Conn Metal Finishing Co — Hamden

Anodizing Equipment
Conn Metalcraft Inc — New Haven

Artificial Leather
Permatex Fabrics Corp The — Jewett City

Asbestos
Auburn Manufacturing Company The (gaskets, packings, wicks) — Middletown

Asbestos & Rubber Packing
Colt's Manufacturing Company — Hartford

Asarcon Bronze
Knapp Foundry Company Inc (bushing & bearing stock) — Guilford

Assemblies—Small
Barnes Co The Wallace Div Associated Spring Corp — Bristol
Greist Manufacturing Co The — New Haven
Humason Mfg Co The — Forestville
J H Sessions & Son — Bristol

Auto Cable Housing
Wiremold Company The — Hartford

Automatic Control Instruments
Bristol Co The (temperature, pressure, flow, humidity, time) — Waterbury

Automobile Accessories
Kilbourn-Sauer Company (lights and other accessories) — Fairfield

Automotive Bodies
Metropolitan Body Company — Bridgeport

Automotive Parts
Eis Manufacturing Co (Hydraulic and Mechanical) — Middletown
Raybestos Division of Raybestos-Manhattan Inc (Brake Lining, Lined Brake Shoes, Clutch Facings, Automatic Transmission Parts, Fan Belts, Radiator Hose and Miscellaneous Rubber) — Bridgeport

Automotive & Service Station Equipment
Scovill Manufacturing Company (Canned Oil Dispensers) — Waterbury 91

Automotive Tools
Eis Manufacturing Company — Middletown

Bags—Paper
American Paper Goods Company The — Kensington

Bakelite Moldings
Watertown Mfg Co The — Watertown

Balls
Abbott Ball Co The (steel bearing and burnishing) — Hartford
Hartford Steel Ball Co The (steel bearing and burnishing, brass, bronze, monel, stainless aluminum) — Hartford
Killan Steel Ball Corp The — Hartford

Banbury Mixers
Farrel-Birmingham Company Inc — Ansonia

Barrels
Abbott Ball Co The (burnishing and tumbling) — Hartford
Hartford-Steel Ball Co The (tumbling) — Hartford

Barrels—Tumbling
Conn Metalcraft Inc — New Haven

Baskets—Wire
Rolock Inc — Fairfield

Bathroom Accessories
Autoyre Company The — Oakville
Charles Parker Co The — Meriden

Batteries
Bond Electric Corporation Division of Olin Industries Inc (flashlight, radio, hearing aid and others) — New Haven
Winchester Repeating Arms Co Division of Olin Industries Inc (flashlight, radio, hearing aid and others) — New Haven

Bearings
Fafnir Bearing Co (ball) — New Britain
Marlin-Rockwell Corporation — Plainville
New Departure Div of General Motors (ball) — Bristol
Norma-Hoffmann Bearings Corp (ball and roller) — Stamford

Bellows
Bridgeport Thermostat Company Inc (metallic) — Bridgeport

Bellows Assemblies
Bridgeport Thermostat Company Inc — Bridgeport

Bellows Shaft Seal Assemblies
Bridgeport Thermostat Company Inc — Bridgeport

Bells
Bevin Brothers Mfg Co. — East Hampton
Gong Bell Co The — East Hampton
N N Hill Brass Co The — East Hampton

Belt Fasteners
Saling Manufacturing Company (patented self-aligning) — Unionville

Belting
Hartford Belting Co — Hartford
Russell Mfg Co The — Middletown
Thames Belting Co The — Norwich

Bends—Pipe or Tube
National Pipe Bending Co The — 160 River St New Haven

Bicycle Coaster Brakes
New Departure Div General Motors Corp — Bristol

Bicycle Sundries
New Departure Div General Motors Corp — Bristol

Binders Board
Colonial Board Company — Manchester

Biological Products
Ernst Bischoff Company Inc — Ivoryton

Blacking Salts for Metals
Enthone Inc — New Haven
Mitchell-Bradford Chemical Co — Bridgeport

Black Oxide Treatment
Bennett Metal Treating Co The 1045 New Britain Ave — Elmwood

Blades
Capewell Manufacturing Company Metal Saw Division (hack saw and band saw) — Hartford

Blankets—Automatic
General Electric Company — Bridgeport

Blocks
Howard Company (cupola fire clay) — New Haven

Blower Fans
Colonial Blower Company — Plainville
Spencer Turbine Co The — Hartford

Blower Systems
Colonial Blower Company — Plainville
Ripley Co — Middletown

Blueprints and Photostats
Joseph Merritt & Co — Hartford

Boilers
Bigelow Co The — New Haven

Bolts and Nuts
Blake & Johnson Co The (nuts machine screw-bolts, stove) — Waterville
Clark Brothers Bolt Co — Milldale

Bonderizing
Clairglow Mfg Company — Portland (Advt.)

Bottle Openers
Scoville Mfg Co (steel, anodized aluminum) Waterbury

Box Board
Lydall & Foulds Paper Co The Manchester
National Folding Box Co Inc New Haven
Robertson Paper Box Co Montville
Gair Company Inc Robert Montville
New Haven Board and Carton Co The New Haven

Boxes
Clairglow Mfg Company (metal) Portland
Connecticut Container Corporation New Haven
Gair Company Inc Robert (corrugated and solid fibre shipping containers) Portland
Merriam Mfg Co (steel cash, bond, security, fitted tool and tackle boxes) Durham
Warner Bros Co The (Acetate, Paper, Acetate and Paper Combinations, Counter Display, Setup) Bridgeport

Boxes and Crates
City Lumber Co of Bridgeport Inc The Bridgeport
Wallingford Planing Mill Co Inc Yalesville

Boxes—Metal
Merriam Mfg Co (Bond and Security, Cash and Utility, Personal Files and Drawer Safes) Durham

Boxes—Paper—Folding
Atlantic Carton Corp Norwich
Bridgeport Paper Box Co Bridgeport
Carpenter-Hayes Paper Box Co Inc The East Hampton
Curtis & Sons Inc S Sandy Hook
Dowd Carton Co M S Groton
Folding Cartons Incorporated (paper, folding) Versailles
Gair Company Inc Robert Montville
H J Mills Inc Bristol
National Folding Box Co Inc (paper folding) New Haven
New Haven Board and Carton Co The New Haven
Robertson Paper Box Co Montville
Warner Bros Co The Bridgeport

Boxes—Paper—Setup
Box Shop Inc The New Haven
Bridgeport Paper Box Co Bridgeport
Heminway Corporation The Waterbury
H J Mills Inc Bristol
Strouse Adler Company The New Haven
Warner Bros Co The Bridgeport

Brake Cables
Eis Manufacturing Co Middletown

Brake Linings
Raybestos Division of Raybestos-Manhattan Inc (Automotive and Industrial) Bridgeport
Russell Mfg Co The Middletown

Brake Service Parts
Eis Manufacturing Co Middletown

Brass & Bronze
American Brass Co The (sheet, wire, rods, tubes) Waterbury
Bridgeport Brass Company (sheet, rod, wire and tubing) Bridgeport
Bristol Brass Corp The (sheet, wire, rods) Bristol
Chase Brass & Copper Co Waterbury
Miller Company The (phosphor bronze and brass in sheets, strips, rolls) Meriden
Plume & Atwood Mfg Co The (sheet, wire, rod) Thomaston
Scovill Manufacturing Company Waterbury 91
Tinsheet Metals Co The (sheets and rolls) Waterbury
Western Brass Mills Division of Olin Industries Inc (sheet, strip) New Haven

Brass & Bronze Ingot Metal
Plume & Atwood Mfg Co The Thomaston
Whipple and Choate Company The Bridgeport

Brass, Bronze, Aluminum Castings
Charles Parker Company The Meriden
Stamford Casting Company Inc Stamford
Victors Brass Foundry Inc Guilford

Brass Goods
American Brass Company The Waterbury
Plume & Atwood Mfg Co The (to order) Waterbury
Rostand Mfg Co The (Ecclesiastical Brass Wares) Milford
Scovill Manufacturing Company (to order) Waterbury 91
Western Brass Mills Division of Olin Industries Inc New Haven

Brass Mill Products
American Brass Company The Waterbury
Bridgeport Brass Co Bridgeport
Chase Brass & Copper Co Waterbury
Plume & Atwood Mfg Co The Thomaston
Scovill Manufacturing Company Waterbury 91
Western Brass Mills Division of Olin Industries Inc New Haven

Brick-Building
Donnelly Brick Co The New Britain

Bricks—Fire
Howard Company New Haven
Mullite Refractories Co The Shelton

Bright Wire Goods
Sargent & Company (Screw Eyes, Screw Hooks, Cup Hooks, Hooks and Eyes, C H Hooks) New Haven

Broaching
Hartford Special Machinery Co The Hartford

Bronze & Aluminum Castings
Charles Parker Co Meriden
Knapp Foundry Company Inc (rough or machined) Guilford

Brooms—Brushes
Fuller Brush Co The Hartford

Buckles
B Schwanda & Sons Staffordville
G E Prentice Mfg Co The Kensington
Hawie Mfg Co The Bridgeport
John M Russell Mfg Co Inc. Naugatuck
North & Judd Manufacturing Co New Britain
Patent Button Co The Waterbury
United States Rubber Company Shoe Hardware Division Waterbury

Buffing & Polishing Compositions
Apothecaries Hall Co Waterbury
Lea Mfg Co Waterbury

Buffing Wheels
Williamsville Buff Div The Bullard Clark Company Danielson

Burners
Plume & Atwood Mfg Co The (kerosene oil lighting) Waterbury

Burners—Automatic
Peabody Engineering Corporation Stamford

Burners—Coal and Oil
Peabody Engineering Corporation (Combined) Stamford

Burners—Gas
Peabody Engineering Corporation (Blast Furnace) Stamford

Burners—Gas and Oil
Peabody Engineering Corporation (Combined) Stamford

Burners—Refinery
Peabody Engineering Corporation (For Gas and Oil) Stamford

Burnishing
Abbott Ball Co The (Burnishing Barrells and Burnishing Media) Hartford

Burs
Pratt & Whitney Div Niles-Bement-Pond Co West Hartford

Busways
Distribution Assemblies Department, General Electric Co Plainville

Buttons
B Schwanda & Sons Staffordville
Frank Parizek Manufacturing Co The Putnam
Patent Button Co The Waterbury
Scovill Manufacturing Company (Uniform and Tack Fasteners) Waterbury 91
Waterbury Companies Inc (Uniform and Fancy Dress) Waterbury

Cabinets
Charles Parker Co The (medicine) Meriden

Cabinet Work
Hartford Builders Finish Co Hartford

Cable—Asbestos Insulated
Rockbestos Products Corp New Haven

Cable—BX Armored
General Electric Company Bridgeport

Cable—Nonmetallic Sheathed
General Electric Company Bridgeport

Cable—Service Entrance
General Electric Company Bridgeport

Cages
Andrew B Hendryx Co The (bird and animal) New Haven

Cams
American Cam Company Inc Hartford
Hartford Special Machinery Co The Hartford
Rowbottom Machine Company Inc Waterbury

Canvas Products
F B Skiff Inc Hartford

Capacitors
Electro Motive Mfg Co Inc The (mica & trimmer) Willimantic

Card Clothing
Standard Card Clothing Co The (for textile mills) Stafford Springs

Carpenter's Tools
Sargent & Company (Planes, Squares, Plumb Bobs, Bench Screws, Clamps and Saw Vices) New Haven

Carpet
B F Goodrich Sponge Products Division Shelton

Carpet Cushion
B F Goodrich Sponge Products Division Shelton

Carpets and Rugs
Bigelow-Sanford Carpet Co Thompsonville

Casters
Bassick Company The (Industrial and General) Bridgeport

Casters—Industrial
George P Clark Co Windsor Locks

Castings
Connecticut Foundry Co (grey iron) Rocky Hill
Connecticut Malleable Castings Co (malleable iron castings) New Haven
Consolidated Industries Inc West Cheshire
Charles Parker Company The (brass, bronze, aluminum) Meriden
Eastern Malleable Iron Company The (malleable iron, metal and alloy) Naugatuck
Farrel-Birmingham Company Inc (Meehanite, Nodular, Iron, Steel) Ansonia
Gillette-Vibber The (grey iron, brass, bronze, aluminum, also Bronze Bushing Stocks) New London
Plainville Casting Company (gray, alloy and high tensile irons) Plainville
Malleable Iron Fittings Co (malleable iron and steel) Branford
McLagon Foundry Co (grey iron) New Haven
Meyer Iron and Brass Foundry Inc (grey iron) Shelton
Newton-New Haven Co (zinc and aluminum) 688 Third Ave West Haven
Philbrick-Booth & Spencer Inc (grey iron) Hartford
Producto Machine Company The Bridgeport
Scovill Manufacturing Company (Brass & Bronze) Waterbury 91
Stamford Casting Company Inc (Aluminum, Magnesium and Bronze) Stamford
Turner & Seymour Mfg Co The (gray iron, semi steel and alloy) Torrington
Union Mfg Co (grey iron & semi steel) New Britain
Waterbury Foundry Company The (highway & sash weights) Waterbury
Wilcox Crittenden & Co Inc (gray iron and brass) Middletown

Castings—Investment
Arwood Precision Casting Corp Groton

Cements—Refractory
Mullite Refractory Co The Shelton

Chain
John M. Russell Mfg Co Inc Naugatuck
Turner and Seymour Mfg Co The (weldless, sash, jack, safety, furnace, universal, lion and cable) Torrington

Chain—Power Transmission and Conveying
Whitney Chain Company Hartford

Chain—Welded and Weldless
Round Chain Div. Republic Steel Corp. Bridgeport

Chain—Bead
Auto-Swage Products Inc Shelton
Bead Chain Mfg Co The Bridgeport

Chairs
The Hitchcock Chair Company Riverton
(Advt.)

Chemical Manufacturing
Carwin Company The — North Haven

Chemicals
American Cyanamid Company — Waterbury
Apothecaries Hall Co — Waterbury
Carwin Company The — North Haven
Macalaster Bicknell Company — New Haven
MacDermid Incorporated — Waterbury
Naugatuck Chemical Division United States Rubber Co — Naugatuck
New England Lime Company — Canaan
Pfizer & Co Inc Chas — Groton

Chemicals—Agriculture
Naugatuck Chemical Division United States Rubber Co (insecticides, fungicides, weed killers) — Naugatuck

Christmas Light Clips
Foursome Manufacturing Co — Bristol

Chromium Plating
Chromium Corp of America — Waterbury
Chromium Process Company The — Shelton
City Plating Works Inc — Bridgeport

Chucks
Cushman Chuck Co The — Hartford
Horton Chuck Div The E Horton & Son Company — Windsor Locks
Jacobs Manufacturing Co The — West Hartford
Union Manufacturing Company — New Britain

Chucks—Drill
Jacobs Manufacturing Co The — West Hartford

Chucks & Face Plate Jaws
Cushman Chuck Co The — Hartford
Union Mfg Co — New Britain
Horton Chuck Div The E Horton & Son Company — Windsor Locks

Chucks—Power Operated
Cushman Chuck Co The — Hartford
Union Manufacturing Company — New Britain

Circuit Breakers
Trumbull Components Department, General Electric Co — Plainville

Clay
Howard Company (Fire Howard "B" and High Temperature Dry) — New Haven

Cleaning Compounds
Enthone Inc (Industrial) — New Haven

Cleansing Compounds
MacDermid Incorporated — Waterbury

Clock Mechanisms
Lux Clock Mfg Co The — Waterbury

Clocks
E Ingraham Co The — Bristol
Seth Thomas Clocks — Thomaston
United States Time Corporation The — Waterbury

Clocks—Alarm
Lux Clock Mfg Co The — Waterbury

Clocks—Automatic Cooking
Lux Clock Mfg Co The — Waterbury

Clutches
Snow-Nabstedt Gear Corp The — New Haven

Clutch Facings
Raybestos Division of Raybestos-Manhattan Inc (Molded, Woven, Semi-metallic and Full-metallic) — Bridgeport
Russell Mfg Co The — Middletown

Coils
Dano Electric Company — Winsted

Coils—Electric
Bittermann Electric Company — Canaan

Coils—Pipe or Tube
National Pipe Bending Co The — 160 River St New Haven
Whitlock Manufacturing Co The — Hartford

Commercial Heat Treating
A F Holden Company The — 52 Richard St West Haven

Commercial Truck Bodies
Metropolitan Body Company — Bridgeport

Comparators
Pratt & Whitney Div Niles-Bement-Pond Co (Electro-limit and Air-O-Limit) — West Hartford

Compressors
Norwalk Company Inc (high pressure air and gas) — South Norwalk

Concrete Products
Plastricrete Corp — Hamden

Cones
Sonoco Products Co (Climax-Lowell Div) (Paper) — Mystic

Consulting Engineers
Stanley P Rockwell Co Inc The (Consulting) 296 Homestead Ave — Hartford

Continuous Mill Gages
Pratt & Whitney Div Niles-Bement-Pond Co — West Hartford

Contract Machining
Malleable Iron Fittings Company — Branford
Charles Parker Co — Meriden

Contract Manufacturers
Fenn Mfg Co The (Precision Machine Work) — Newington
Greist Mfg Co The (metal parts and assemblies) 503 Blake St — New Haven
Merriam Mfg Co (production runs—metal boxes and containers to specifications) — Durham
Charles Parker Co (sheet metal fabricators) — Meriden
Plume & Atwood Mfg Co The (metal parts & assemblies) — Waterbury
Scovill Manufacturing Company (metal parts and assemblies) — Waterbury 91
J H Sessions & Son — Bristol

Controllers
Bristol Company The — Waterbury
Manning Maxwell & Moore Inc — Stratford

Controls—Remote
Panish Controls (Remote Controls for Marine & Aeronautic Applications) — Bridgeport

Conveyor Systems
Leeds Electric & Mfg Co The — East Haven
Production Equipment Co — Meriden

Copper
American Brass Corp The (sheet, wire, rods, tubes) — Waterbury
Bridgeport Brass Company (sheet, rod, wire and tubing) — Bridgeport
Bristol Brass Corp The (steel) — Bristol
Chase Brass & Copper Co (sheet, rod, wire tube) — Waterbury
Thinsheet Metals Co The (sheets and rolls) — Waterbury
Western Brass Mills Division of Olin Industries Inc (sheet, strip) — New Haven

Copper Castings
Knapp Foundry Company Inc — Guilford

Copper Sheets
American Brass Company The — Waterbury
New Haven Copper Co The — Seymour

Copper Shingles
New Haven Copper Co The — Seymour

Copper Water Tube
American Brass Company The — Waterbury
Bridgeport Brass Co — Bridgeport

Cords—Asbestos
General Electric Company — Bridgeport

Cords—Braided
General Electric Company — Bridgeport

Cords—Heater
General Electric Company — Bridgeport

Cords—Portable
General Electric Company — Bridgeport

Cord Sets
Seeger-Williams Inc — Bridgeport

Cord Sets—Electric
General Electric Company — Bridgeport

Cork Cots
Sonoco Products Co (Climax-Lowell Div) — Mystic

Corrugated Box Manufacturers
Connecticut Container Corporation — New Haven
Corrugated Containers Inc — Hartford

Corrugated Shipping Cases
Connecticut Container Corporation — New Haven
Connecticut Corrugated Box Div Robert Gair Co Inc — Portland
D L & D Container Corp 87 Shelton Ave — New Haven

Cosmetic Containers
Evelet Specialty Co The — Waterbury
Plume & Atwood Mfg Co The (metal) — Waterbury

Cosmetics
J B Williams Co The — Glastonbury

Cotton and Asbestos Wicking
Bland Burner Co The — Hartford

Cotton Yarn
Floyd Cranska Co The — Moosup

Counting Devices
Veeder-Root Inc — Hartford

Couplings—Self-Sealing
Sperry Products Inc — Danbury

Cranes and Conveyors
I-B Engineering Sales Co — New Haven

Crushers
Farrel-Birmingham Company Inc (Stone and Ore) — Ansonia

Cups—Paper
American Paper Goods Company The ("Puritan") — Kensington

Cushioning for Packaging
B F Goodrich Sponge Products Division — Shelton
Gilman Brothers Co The — Gilman

Cut Stone
Dextone Co The — New Haven

Cutters
Barnes Tool Company The (pipe cutters, hand) — New Haven
Mitrametric Co The (ground pinion) — Torrington
Pratt & Whitney Div Niles-Bement-Pond Co (Milling Cutters all types) — West Hartford

Decorative Plating and Polishing
City Plating Works Inc — Bridgeport

Deep Drawings
Stanley Pressed Metal — New Britain

Delayed Action Mechanism
M H Rhodes Inc — Hartford
R W Cramer Company Inc The — Centerbrook

Demineralizers
Crystal Research Laboratories — Hartford

Diamonds—Industrial
Diamond Tool and Die Works — Hartford

Dictating Machines
Dictaphone Corporation — Bridgeport
Gray Manufacturing Company The — Hartford
Soundscriber Corporation The — New Haven

Die Castings
Newton-New Haven Co Inc — New Haven

Die Casting Dies
ABA Tool & Die Co — Manchester
Parker Stamp Works Co The — Hartford
Weimann Bros Mfg Co The — Derby
Eastern Machine Screw Corp The Truman & Barclay Sts — New Haven

Die Heads—Self Opening
Eastern Machine Screw Corp The — New Haven

Die Polishing Machinery
Hartford Special Machinery Co The — Hartford

Die Sets
Pratt & Whitney Div Niles-Bement-Pond Co (Precision) — West Hartford
Producto Machine Company The — Bridgeport
Union Mfg Co (precision, steel and semi-steel) — New Britain

Dies
Hoggson & Pettis Mfg Co The 141 Brewery St — New Haven
Mitrametric Co The (ground for gears) — Torrington
Parker Stamp Works Inc The (plastics and die castings) — Hartford
Pratt & Whitney Div Niles-Bement-Pond Co (Monocone and Ducone Dies) — West Hartford

Die Sinkers
Pratt & Whitney Div Niles-Bement-Pond Co — West Hartford

Dies and Die Sinking
Consolidated Industries — West Cheshire

Dish Drying Machines
Colt's Manufacturing Company — Hartford

Dish Washing Machines
Colt's Manufacturing Company — Hartford

Displays—Metal
Merriam Mfg Co (Contract Work to Individual Specifications) — Durham

Distribution Centers
Distribution Assemblies Department, General Electric Co — Plainville

Door Closers
Sargent & Company — New Haven
Yale & Towne Mfg Co The — Stamford

Dowel Pins
Allen Manufacturing Co The — Hartford
Holo-Krome Screw Corp The — West Hartford

Drafting Accessories
Joseph Merritt & Co — Hartford

Drill Presses
Townsend Mfg Co The H P — Elmwood

Drilling Machines
Pratt & Whitney Div Niles-Bement-Pond Co (Deep Hole) — West Hartford

Drilling and Tapping Machinery
Hartford Special Machinery Co The — Hartford

Drop Forgings
Atwater Mfg Co — Plantsville
Blakeslee Forging Company The — Plantsville
Capewell Mfg Company — Hartford
Consolidated Industries — West Cheshire
Wilcox Crittenden & Co Inc — Middletown

Druggists' Rubber Sundries
Seamless Rubber Company The — New Haven

Duplicating Machines—Automatic
Pratt & Whitney Div Niles-Bement-Pond Co — West Hartford

Electric Cables
Rockbestos Products Corp (asbestos insulated) — New Haven

Electric Clocks
Sessions Clock Co The (alarm, kitchen, occasional and office) — Forestville

Electric—Commutators & Segments
Cameron Elec Mfg Co The (rewinding motors) — Ansonia

Electric Cord Springs
Bristol Spring Manufacturing Co — Plainville

Electric Cords
General Electric Company — Bridgeport
Rockbestos Products Corp (asbestos insulated) — New Haven

Electric Eye Control
Ripley Company Inc — Middletown

Electric Fixture Wire
General Electric Company — Bridgeport
Rockbestos Products Corp (asbestosinsulated) — New Haven

Electric Hand Irons
Winsted Hardware Mfg Co (trade mark "Durabilt") — Winsted

Electric Heating Elements
Hartford Element Co — Hartford

Electric Insulation
Case Brothers Inc — Manchester
Stevens Paper Mills Inc The — Windsor

Electric Lighting Fixtures
Fan-Craft Mfg Co (residential, church, post lanterns) — Plainville
Plume & Atwood Mfg Co The — Waterbury
Wasley Products Inc — Plainville

Electric Motor Controls
Arrow-Hart & Hegeman Electric Co The — Hartford

Electrical Outlet and Switch Boxes, and Covers
General Electric Company — Bridgeport

Electric Panel Boards
Federal Electric Products Co Inc — Hartford

Electric Safety Switches
Federal Electric Products Co Inc — Hartford

Electric Shavers
Schick Incorporated — Stamford

Electric Signs
Berger Sign Co — Hartford
United Advertising Corp — New Haven

Electric Switches
Arrow-Hart & Hegeman Electric Co The — Hartford
General Electric Company — Bridgeport

Electric Time Controls
R W Cramer Company Inc The — Centerbrook

Electric Timers
Sessions Clock Co The — Forestville

Electric Timing Motors
Sessions Clock Co The (small) — Forestville

Electric Wire
General Electric Company — Bridgeport
Rockbestos Products Corp (asbestos insulated) — New Haven

Electric Wiring Devices
Arrow-Hart & Hegeman Electric Co The — Hartford
General Electric Company — Bridgeport

Electrical Circuit Breakers
Federal Electric Products Co Inc — Hartford

Electrical Conduit Fittings & Grounding Specialties
Gillette-Vibber Company The — New London

Electrical Control Apparatus
Federal Electric Products Co Inc — Hartford
Plainville Electrical Products Co The — Plainville

Electrical Goods
A C Gilbert Co — New Haven

Electrical Motors
U S Electrical Motors Inc — Milford

Electrical Outlet and Switch Boxes, and Covers
General Electric Company — Bridgeport

Electrical Recorders
Bristol Co The — Waterbury

Electrical Relays and Controls
Allied Control Co — Plantsville

Electrical Switchboards
Plainville Electrical Products Co The — Plainville

Electrical Wiring Systems
Wiremold Co The — Hartford

Electronics
Gray Manufacturing Company The — Hartford
Ripley Co — Middletown
Sturrup Larrabee & Warmers Inc — Middletown

Electroplating
National Sherardizing & Machine Co — Hartford
Waterbury Plating Company — Waterbury

Electroplating—Equipment & Supplies
Enthone Inc — New Haven
Lea Manufacturing Co The — Waterbury
MacDermid Incorporated — Waterbury

Electroplating Processes & Supplies
Enthone Inc — New Haven
United Chromium Incorporated — Waterbury

Electrotypes
Barnum-Hayward Electrotype Co Inc — New Haven
Lockwood Sons Inc Wm H — Hartford
New Haven Electrotype Div Electrographic Corp — New Haven

Elevators
Eastern Machinery Co The (passenger and freight) — New Haven
General Elevator Service Co — Hartford

Enameling
Conn Metal Finishing Co — Hamden
Waterbury Plating Company — Waterbury

Enameling and Finishing
Clairglow Mfg Co — Portland

End Milling Cutters
Pratt & Whitney Div Niles-Bement-Pond Co — West Hartford

Engines
Pratt & Whitney Aircraft Div United Aircraft Corp (aircraft) — East Hartford
Wolverine Motor Works Inc (diesel stationary marine) — Bridgeport

Envelopes
Curtis 1000 Inc — Hartford
United States Envelope Company Hartford Division — Hartford

Envelopes—Stock and Special
American Paper Goods Company The — Kensington

Extractors—Tap
Walton Company The — West Hartford

Eyelets
American Brass Company The — Waterbury
Platt Bros & Co The P O Box 1030 — Waterbury
Plume & Atwood Mfg Co The — Waterbury
Scovill Manufacturing Company — Waterbury 91

Eylets, Ferrules and Wiring Terminals
American Brass Company The — Waterbury

Eylet Machine Products
American Brass Company The — Waterbury
Ball & Socket Mfg Co The — West Cheshire
Plume & Atwood Mfg Co — Waterbury

Fancy Dress Buttons and Buckles
Waterbury Companies Inc — Waterbury

Fans—Electric
General Electric Company — Bridgeport

Fasteners—Slide & Snap
G E Prentice Mfg Co The — Kensington
Scovill Manufacturing Company (snap and slide fasteners) — Waterbury 91

Felt
Auburn Manufacturing Company The (mechanical, cut parts) — Middletown
Drycor Felt Company (paper makers and industrial) — Staffordville

Felt—All Purpose
American Felt Co (Mill & Cutting Plant) — Glenville
Chas W House & Sons Inc (Mills & Cutting Plant) — Unionville

Fenders—Boat
B F Goodrich Sponge Products Division — Shelton

Fibre Board
Case Brothers Inc — Manchester
C H Norton Co The — North Westchester
Stevens Paper Mills Inc The — Windsor

Finger Nail Clippers
H C Cook Co The — 32 Beaver St Ansonia

File Cards
Standard Card Clothing Co The — Stafford Springs

Films
Cine-Video Productions Inc — Milford

Firearms
Colt's Manufacturing Company — Hartford
Marlin Firearms Co The — New Haven
O F Mosberg & Sons Inc — New Haven
Remington Arms Company Inc — Bridgeport
Winchester Repeating Arms Company Division Olin Industries Inc — New Haven

Fire Hose
Fabrics Fire Hose (municipal and industrial) — Sandy Hook

Fireplace Goods
American Windshield & Specialty Co The 881 Boston Post Road — Milford
John P Smith Co The (screens) 423-33 Chapel St — New Haven

Fireproof Floor Joists
Dextone Co The — New Haven

Fireworks
M Backes' Sons Inc — Wallingford

Fishing Tackle
Bevin-Wilcox Line Co The (lines) — East Hampton
H C Cook Co The 32 Beaver St — Ansonia

Flashlights
Bond Electric Corporation Division of Olin Industries Inc — New Haven
Bridgeport Metal Goods Mfg Co — Bridgeport
Winchester Repeating Arms Company Division Olin Industries Inc — New Haven

Flat Springs
Bristol Spring Manufacturing Co — Plainville

Flexible Shaft Machines
Pratt & Whitney Div Niles-Bement-Pond Co — West Hartford

IT'S MADE IN CONNECTICUT

Floor & Ceiling Plates
Beaton & Cadwell Mfg Co The — New Britain

Fluorescent Lighting Equipment
Fullerton Manufacturing Corp — Norwalk
Vanderman Manufacturing Co The — Willimantic
Wiremold Company The — Hartford

Foam Rubber
B F Goodrich Sponge Products Division — Shelton

Forgings
Billings & Spencer Company — Hartford
Clark Brothers Bolt Co — Milldale
Consolidated Industries Inc — West Cheshire
Heppenstall Co (all kinds and shapes) — Bridgeport
Scovill Manufacturing Company (Non-ferrous) — Waterbury 91

Foundries
Connecticut Malleable Castings Co (malleable iron castings) — New Haven
Farrel-Birmingham Company Inc (Iron and Steel) — Ansonia
Charles Parker Company The (iron, brass, bronze, aluminum) — Meriden
Plainville Casting Company (gray, alloy and high tensile irons) — Plainville
Producto Machine Company The — Bridgeport
Stamford Casting Company Inc (Aluminum, Magnesium and Bronze) — Stamford
Turner & Seymour Mfg Co The (gray iron, semi steel and alloy) — Torrington
Union Mfg Co (gray iron & semi steel) — New Britain
Wilcox Crittenden & Co Inc (iron, brass, aluminum and bronze) — Middletown

Fountain Pens and Mechanical Pencils
Waterman Pen Company Inc — Seymour

Foundry Riddles
John P Smith Co The — 423-33 Chapel St New Haven

Fuel Oil Pump and Heater Sets
Peabody Engineering Corporation — Stamford

Furnaces
Norwalk Airconditioning Corp The (warm air oil fired) — South Norwalk

Furnace Linings
Mullite Refractories Co The (refractories, super refractories) — Shelton

Fuses—Plug and Cartridge
General Electric Company — Bridgeport

Gage Blocks
Pratt & Whitney Div Niles-Bement-Pond Co (Alloy steel and Carbide, Hoke and USA) — West Hartford

Galvanizing
Malleable Iron Fittings Co — Branford
Wilcox Crittenden & Co Inc — Middletown

Galvanizing & Electrical Plating
Gillette-Vibber Co The — New London

Gaskets
Auburn Manufacturing Company The (from all materials) — Middletown
Raybestos Division of Raybestos-Manhattan Inc — Bridgeport
Tsingris Die Cutting Corp (from all materials) — Waterbury

Gas Range Conversion Burner
Holyoke Heater Corp of Conn Inc — Hartford

Gas Scrubbers, Coolers and Absorbers
Peabody Engineering Corporation — Stamford

Gauges
Bristol Co The (pressure and vacuum—recording automatic control) — Waterbury
Helicoid Gage Division American Chain & Cable Co The (pressure and vacuum) — Bridgeport
Manning Maxwell & Moore Inc — Stratford
Pratt & Whitney Div Niles-Bement-Pond Co (Precision Measurement all types) — West Hartford

Gears
Mitrametric Co The (blanked fine pitch) — Torrington

Gears and Gear Cutting
Farrel-Birmingham Company Inc — Ansonia
Fenn Mfg Co The — Newington
Hartford Special Machinery Co The — Hartford

Glass Blowing
Macalaster Bicknell Company — New Haven

Glass Cutters
Fletcher-Terry Co The — Forestville

Golf Equipment
Horton Mfg Co The (clubs, shafts, balls, bags) — Bristol

Greeting Cards
A D Steinbach & Sons Inc — New Haven

Grinding
Farrel-Birmingham Company Inc (Roll and Cylindrical) — Ansonia
Hartford Special Machinery Co The (gears, threads cams and splines) — Hartford
Horberg Grinding Industries Inc (Precision custom grinding; centerless, cylindrical, surfaces, internal and special) — 19 Staples St Bridgeport

Grinding Heads—Internal
Pratt & Whitney Div Niles-Bement-Pond Co (Pneumatic, High Speed) — West Hartford

Grinding Machines
Farrel-Birmingham Company Inc (Roll) — Ansonia
Pratt & Whitney Div Niles-Bement-Pond Co (Surface, Die, Gear and Cutter Grinders) — West Hartford
Rowbottom Machine Company Inc (cam) — Waterbury

Grommets
American Brass Company The — Waterbury
Plume & Atwood Mfg Co The — Waterbury

Guards for Machinery
Wheeler Co The G E — New Haven

Hack and Band Saw Blades
Capewell Manufacturing Co The — Hartford

Hand Tools
Billings & Spencer Company (wrenches, sockets and shop tools) — Hartford
Bridgeport Hdwe Mfg Corp The (nail pullers, scout axes, box opening tools, trowels, coping saws, putty knives) — Bridgeport

Hard Crome
City Plating Works Inc — Bridgeport

Hardness Testers
Wilson Mechanical Instrument Div American Chain & Cable Company Inc — Bridgeport

Hardware
Bassick Company The (Automotive) — Bridgeport
Harloc Products Corp — New Haven
Sargent & Company — New Haven
Wilcox Crittenden & Co Inc (marine heavy and industrial) — Middletown
Yale & Towne Mfg Co The — Stamford

Hardware—Marine & Bus
Rostand Mfg Co The — Milford

Hardware—Trailer Cabinet
Excelsior Hardware Co The — Stamford

Hardware, Trunk & Luggage
Corbin Cabinet Lock Div American Hardware Corp — New Britain
I H Sessions & Son — Bristol
Yale & Towne Mfg Co The — Stamford

Hat Machinery
Doran Bros Inc — Danbury

Health Surgical & Orthopedic Supports
Berger Brothers Company The (custom made for back, breast, and abdomen) — New Haven

Heat Exchangers
Whitlock Manufacturing Co The — Hartford

Heat Elements
Safeway Heat Elements Inc (woven wire resistance type) — Middletown

Heat Treating
A F Holden Co The 52 Richard St — West Haven
Bennett Metal Treating Co The 1045 New Britain Ave — Elmwood
New Britain-Gridley Machine Division The New Britain Machine Co — New Britain
Stanley P Rockwell Co Inc The 296 Homestead Ave — Hartford

Heat-Treating Equipment
Autoyre Company The — Oakville
Barnes Co The Wallace Div Associated Spring Corp — Bristol
A F Holden Company The 52 Richard Street — West Haven(Main Plant)
Bauer & Company Inc — Hartford
Rolock Inc (Retorts, Muffles, etc.) — Fairfield
Stanley P Rockwell Co Inc The (commercial) 296 Homestead Ave — Hartford

Heat Treating Fixtures
Rolock Inc (Trays, Baskets, etc.) — Fairfield
Wiretex Mfg Co Inc — Bridgeport

Heat Treating Salts and Compounds
A F Holden Company The 52 Richard Street — West Haven
Mitchell-Bradford Chemical Co — Bridgeport

Heating and Cooling Coils
G & O Manufacturing Co — New Haven

Heating Elements
Hartford Element Co — Hartford

Heavy Chemicals
Naugatuck Chemical Division United States Rubber Co (sulphuric, nitric and muriatic acids and aniline oil) — Naugatuck

Hex-Socket Screws
Bristol Company The — Waterbury
Holo-Krome Screw Corp The — West Hartford

Highway Guard Rail Hardware
Malleable Iron Fittings Co — Branford

Hinges
Homer D Bronson Company — Beacon Falls

Hobs and Hobbings
ABA Tool & Die Co — Manchester
Pratt & Whitney Div Niles-Bement-Pond Co (Die and Thread Milling) — West Hartford

Hoists
J-B Engineering Sales Co — New Haven

Hoists and Trolleys
Union Mfg Company — New Britain

Home Laundry Equipment
General Electric Company — Bridgeport

Hose—Flexible Metallic
American Brass Co
American Metal Hose Branch — Waterbury

Hose Supporter Trimmings
Hawie Mfg Co The (So-Lo Grip Tabs) — Bridgeport

Hospital Signal Systems
Conn Telephone & Electric Corp Subsidiary of Great American Industries Inc — Meriden

Hydraulic Brake Fluids
Eis Manufacturing Co — Middletown

Hydraulic Controls
Sperry Products Inc — Danbury

Hypodermic Needles
Roehr Products Company — Waterbury

Ice Buckets
B F Goodrich Sponge Products Division — Shelton

Inductors
C G S Laboratories Inc — Stamford

Industrial Displays
Sansone Co S Frederick (Designers Builders and Counselors) — Short Beach

Industrial Finishes
Atlas Powder Co Zapon Div — Stamford
Chemical Coatings Corporation — Rocky Hill
United Chromium Incorporated — Waterbury

Industrial Tools—Powder Actuated
Remington Arms Company Inc — Bridgeport

Infra-Red Equipment
Leeds Electric and Mfg Co The — Hartford

Inks
Waterman Pen Company Inc — Seymour

Insecticides
American Cyanamid Company — Waterbury

Insecticide Bomb
Bridgeport Brass Company (Aer*a*sol) — Bridgeport

Insulated Wire & Cable
General Electric Company — Bridgeport
Kerite Company The — Seymour

Insulated Wire & Cable Machinery
Davis Electric Company — Wallingford

Instruments
Bristol Company The — Waterbury
J-P-T Instruments Inc (Electrical and Temperature) — New Haven
Manning Maxwell & Moore Inc — Stratford
Pratt & Whitney Div Niles-Bement-Pond Co (Precision Measuring) — West Hartford

Insulation
Gilman Brothers Co The — Gilman (Advt.)

Inter-Communications Equipment
Conn Telephone & Electric Corp Subsidiary of Great American Industries Inc — Meriden

Interval Timers
Lux Clock Manufacturing Company — Waterbury
Rhodes Inc M H — Hartford

Ironing Machines—Electric
General Electric Company — Bridgeport

Jacquard
Case Brothers Inc — Manchester

Japanning
J H Sessions & Son — Bristol

Jig Borer
Moore Special Tool Co (Moore) — Bridgeport
Pratt & Whitney Div Niles-Bement-Pond Co — West Hartford

Jig Grinder
Moore Special Tool Co (Moore) — Bridgeport

Keller Machines
Pratt & Whitney Div Niles-Bement-Pond Co — West Hartford

Key Blanks
Sargent & Company — New Haven
Yale & Towne Mfg Co The — Stamford

Labels
J & J Cash Inc (Woven) — South Norwalk
Naugatuck Chemical Division United States Rubber Co (for rubber articles) — Naugatuck

Label Moisteners
Better Packages Inc — Shelton

Laboratory Equipment
Eastern Industries Inc — New Haven

Laboratory Supplies
Macalaster Bicknell Company — New Haven

Laces
American Fabrics Company The — Bridgeport
Wilcox Lace Corporation The — Middletown

Laces and Nettings
Wilcox Lace Corporation The — Middletown

Lacquers & Synthetic Enamels
Atlas Powder Co Zapon Div — Stamford
Chemical Coatings Corporation — Rocky Hill
United Chromium Incorporated — Waterbury

Ladders
A W Flint Co — 196 Chapel St New Haven

Lamps
Plume & Atwood Mfg Co The (metal oil) — Waterbury

Lampholders—Incandescent and Fluorescent
General Electric Company — Bridgeport

Lamp Shades
Verplex Company The — Essex

Lathes—Contin-U-Matic
Bullard Company The (vertical multi-spindle-continuous turning type) — Bridgeport

Lathes—30H Man-Au-Trol
Bullard Company The (horizontal 3 spindle) — Bridgeport

Lathes—Mult-Au-Matic
Bullard Company The (vertical multi-spindle-indexing type) — Bridgeport

Lathes—Toolroom and Automatic
Pratt & Whitney Div Niles-Bement-Pond Co — West Hartford

Lathes—Vertical Turret
Bullard Company The (single spindle) — Bridgeport

Laundry Roll Covers
Atlas Powder Co Zapon Div — Stamford

Lead Plating
Christie Plating Co The — Groton

Leather
Herman Roser & Sons Inc (Genuine Pigskin) — Glastonbury

Leather Dog Furnishings
Andrew B Hendryx Co The — New Haven
The Smith-Worthington Saddlery Co — Hartford

Leather Goods Trimmings
G E Prentice Mfg Co The — Kensington

Leather, Mechanical
Auburn Manufacturing Company The (packings, cubs, washers, etc) — Middletown

Letterheads
Lehman Brothers Inc (designers, engravers, lithographers) — New Haven

Lighting Accessories—Fluorescent
General Electric Company — Bridgeport

Lighting Equipment
Fullerton Manufacturing Corp — Norwalk
Miller Co The (Miller, Duplexalite, Ivanhoe) — Meriden

Lime
New England Lime Company — Canaan

Lipstick Containers
Bridgeport Metal Goods Mfg Co — Bridgeport
Plume & Atwood Manufacturing Co — Waterbury

Lithographers
O'Toole & Sons Inc T — Stamford

Lithographing
Kellogg & Bulkeley A Division of Connecticut Printers Inc — Hartford
Lehman Brothers Inc — New Haven
A D Steinbach & Sons — New Haven

Locks—Banks
Yale & Towne Mfg Co The — Stamford

Locks—Builders
Eagle Lock Co The — Terryville
Sargent & Company — New Haven
Yale & Towne Mfg Co The — Stamford

Locks—Cabinet
Eagle Lock Co The — Terryville
Excelsior Hardware Co The — Stamford
Yale & Towne Mfg Co The — Stamford

Locks—Special Purpose
Eagle Lock Co The — Terryville
Yale & Towne Mfg Co The — Stamford

Locks—Suitcase
Eagle Lock Co The — Terryville

Locks—Suit-Case and Trimmings
Excelsior Hardware Co The — Stamford

Locks—Trunk
Eagle Lock Co The — Terryville
Excelsior Hardware Co The — Stamford
Yale & Towne Mfg Co The — Stamford

Locks—Zipper
Excelsior Hardware Co The — Stamford

Loom—Non-Metallic
Wiremold Company The — Hartford

Lumber & Millwork Products
City Lumber Co of Bridgeport Inc — Bridgeport

Machetes
Collins Company The — Collinsville

Machine Design
Black Rock Mfg Company The — Bridgeport

Machine Tools
Bullard Company The — Bridgeport
Pratt & Whitney Div Niles-Bement-Pond Co — West Hartford
Producto Machine Company The — Bridgeport

Machine Work
Black Rock Mfg Company The — Bridgeport
Farrel-Birmingham Company Inc — Ansonia
Fenn Manufacturing Company The (precision parts) — Newington
Hartford Special Machinery Co The (contract work only) — Hartford
National Sheradizing & Machine Co (job) — Hartford
Parker Stamp Works Inc The (Special) — Hartford
Swan Tool & Machine Co The — Hartford
Torrington Manufacturing Co The (special rolling mill machinery) — Torrington

Machinery
Fenn Manufacturing Company The (special) — Newington
Globe Tapping Machine Company (dial type drilling and tapping) — Bridgeport
Hallden Machine Company The (mill) — Thomaston
Torrington Manufacturing Co The (mill) — Torrington

Machinery—Bolt and Nut
Waterbury Farrel Foundry & Machine Co The — Waterbury

Machinery—Cold Heading
Waterbury Farrel Foundry & Machine Co The — Waterbury

Machinery Dealers & Rebuilders
Botwinik Brothers — New Haven
J L Lucas and Son — Fairfield
State Machinery Co Inc — New Haven

Machinery—Extruding
Standard Machinery Co The — Mystic

Machinery—Metal-Working
Fenn Mfg Co The — Newington
Waterbury Farrel Foundry & Machine Co The — Waterbury
Pratt & Whitney Div Niles-Bement-Pond Co — West Hartford

Machinery—Nut
Waterbury Farrel Foundry & Machine Co The (forming and tapping) — Waterbury

Machinery—Screw and Rivet
Waterbury Farrel Foundry & Machine Co The — Waterbury

Machinery—Wire Drawing
Fenn Mfg Co The — Newington
Waterbury Farrel Foundry & Machine Co The — Waterbury

Machinery—Wire Straightening
Mettler Machine Tool Inc — New Haven

Machines
Campbell Machine Div American Chain & Cable Co Inc (cutting & nibbling) — Bridgeport
Coulter & McKenzie Machine Co The (special, new development engineering design and construction) — Bridgeport
Patent Button Company The — Waterbury

Machines—Automatic
A H Nilson Mach Co The (Special) — Bridgeport

Machines—Automatic Chucking
Bullard Company The — Bridgeport
New Britain-Gridley Machine Division The New Britain Machine Co (multiple spindle and double end) — New Britain
Pratt & Whitney Div Niles-Bement-Pond Co (Potter & Johnson) — West Hartford

Machines—Automatic Screw
New Britain-Gridley Machine Division The New Britain Machine Co (single and multiple spindle) — New Britain

Machines—Automatic Shaft Turning
Bullard Company The (30H lathe—horizontal 3 spindle) — Bridgeport

Machines—Brushing
Fuller Brush Co The — Hartford

Machines—Contin-U-Matic
Bullard Company The (verticle multi-spindle—continuous turning) — Bridgeport

Machines—Draw Benches
Fenn Manufacturing Company The — Newington

Machines—Drill Spacing
Bullard Company The (Bullard spacer—used in conjunction with radical drills) — Bridgeport

Machines—Forming
A H Nilson Mach Co The (four-slide wire and ribbon stock) — Bridgeport

Machines—Mult-Au-Matic
Bullard Company The — Bridgeport

Machines—Paper Ruling
John McAdams & Sons Inc — Norwalk

Machines—Pipe & Bolt Threading
Capewell Mfg Co The — Hartford (Advt.)

IT'S MADE IN CONNECTICUT

Machines—Precision Boring
New Britain-Gridley Machine Division The New Britain Machine Co New Britain

Machines—Rolling
Fenn Manufacturing Company The Newington

Machine—Slotting
Globe Tapping Machine Company The (High Production Screw Head Slotting) Bridgeport
Waterbury Farrel Foundry & Machine Co The (screw head) Waterbury

Machines—Special
Fenn Mfg Co The Newington
Fuller Brush Co The Hartford

Machines—Swaging
Fenn Manufacturing Company The Newington

Machines—Thread Rolling
Hartford Special Machinery Co The Hartford
Waterbury Farrel Foundry & Machine Co The Waterbury

Machines—Turks Head
Fenn Manufacturing Company The Newington

Machines—Well Drilling
Consolidated Industries West Cheshire

Machines—Wire Drawing
Fenn Manufacturing Company The Newington

Magnesium Castings
Stamford Casting Company Stamford

Manicure Instruments
W E Bassett Company The Derby

Manganese Bronze Ingot
Whipple and Choate Company Bridgeport

Marine Engines
Kilborn-Sauer Company (running lights and searchlights) Fairfield
Lathrop Engine Co The Mystic

Marine Equipment
Russell Manufacturing Company The (utility cord and accessory hardware) Middletown
Wilcox Crittenden & Co Inc Middletown

Marine Reserve Gears
Snow-Nabstedt Gear Corp The New Haven

Marking Devices
Hoggson & Pettis Mfg Co The New Haven
Parker Stamp Works Inc The (steel) Hartford

Mats—Newspaper
Lockwood Sons Inc Wm H Hartford

Mattresses
Waterbury Mattress Co Waterbury

Metal Boxes and Displays
Durham Manufacturing Company The Durham
Merriam Mfg Co (Bond, Security, Cash, Utility, Personal Files, Drawer Safes, Custombilt containers and displays) Durham
Charles Parker Co (sheet metal fabricators) Meriden

Metal Cleaners
Apothecaries Hall Co Waterbury
Enthone Inc New Haven
MacDermid Incorporated Waterbury

Metal Cleaning Machines
Colt's Manufacturing Company Hartford

Metal Finishes
Enthone Inc New Haven
Mitchell-Bradford Chemical Co Bridgeport
United Chromium Incorporated Waterbury

Metal Finishing
National Sheradizing & Machine Co Hartford
Waterbury Plating Company Waterbury

Metal Formings
Master Engineering Company West Cheshire
Stanley Pressed Metal New Britain

Metalizing
Conn Metal Finishing Co Hamden

Metal Novelties
H C Cook Co The 32 Beaver St Ansonia

Metal Products—Stampings
American Brass Company The Waterbury
Plume & Atwood Manufacturing Co Waterbury
J H Sessions & Son Bristol
Scovill Manufacturing Company (Made-to-Order) Waterbury 91
Stanley Pressed Metal New Britain

Metal Specialties
Excelsior Hardware Co The Stamford

Metal Stampings
American Brass Company The Waterbury
Autoyre Co The (Small) Oakville
Bridgeport Chain & Mfg Co Bridgeport
DooVal Tool & Mfg Inc The Naugatuck
Excelsior Hardware Co The Stamford
Greist Mfg Co The 503 Blake St New Haven
H C Cook Co The 32 Beaver St Ansonia
Humason Mfg Co The Forestville
J A Otterbein Company The (metal fabrications) Middletown
J. H. Sessions & Son Bristol
Patent Button Co The Waterbury
G E Prentice Mfg Co The Kensington
Plume & Atwood Mfg Co The Waterbury
Saling Manufacturing Company Unionville
Stanley Pressed Metal New Britain
Swan Tool & Machine Co The Hartford
United States Rubber Company Shoe Hardware Division Waterbury
Verplex Company The (Contract) Essex
Waterbury Lock & Specialty Co The Milford

Meters—Gas
Sprague Meter Company Bridgeport

Meters—Parking
Rhodes Inc M H Hartford

Microfilming
American Microfilming Service Company New Haven

Microscope—Measuring
Lundeberg Engineering Company Hartford

Milk Bottle Carriers
John P Smith Co The 423-33 Chapel St New Haven

Millwork
Hartford Builders Finish Co Hartford

Milling Machines
Pratt & Whitney Div Niles-Bement-Pond Co (Keller Tracer—Controlled Milling Machines) West Hartford
Rowbottom Machine Company Inc (cam) Waterbury

Mill Supplies
Wilcox Crittenden & Co Inc Middletown

Miniature Precision Connectors
Gorn Electric Co Stamford

Minute Minders
Lux Clock Mfg Co The Waterbury

Mirror Rosettes and Hangers
Waterbury Companies Inc Waterbury

Mixing Equipment
Eastern Industries Inc New Haven
Gabb Special Products Div. The E Horton & Son Co Windsor Locks

Mops
Fuller Brush Co The Hartford

Motor Control Centers
Distribution Assemblies Department, General Electric Co Plainville

Moulded Plastic Products
Butterfield Inc T F Naugatuck
Colt's Manufacturing Company Hartford
Patent Button Co The Waterbury
Waterbury Companies Inc Waterbury
Watertown Mfg Co The 117 Echo Lake Road Watertown

Mouldings
Himmel Brothers Co The (architectural, metal and store front) Hamden

Moulds
ABA Tool & Die Co Manchester
Hoggson & Pettis Mfg Co The (steel) 114 Brewery St New Haven
Lundeberg Engineering Company (plastics) Hartford
Parker Stamp Works Inc The (compression injection & transfer for plastics) Hartford

Napper Clothing
Standard Card Clothing Co The (for textile mills) Stafford Springs

Nettings
Wilcox Lace Corp The Middletown

Newspaper Mats
Lockwood Sons Inc Wm H Hartford

Nickel Anodes
Apothecaries Hall Co Waterbury
Seymour Mfg Co The Seymour

Nickel Silver
American Brass Company The Waterbury
Plume & Atwood Mfg Co The Thomaston
Seymour Mfg Co The Seymour
Waterbury Rolling Mills Inc (sheets, strips, rolls) Waterbury
Western Brass Mills Division of Olin Industries Inc (sheet, strip) New Haven

Nickel Silver Ingot
Whipple and Choate Company The Bridgeport

Night Latches
Sargent & Company New Haven
Yale & Towne Mfg Co Inc Stamford

Non-ferrous Metal Castings
Miller Company The Meriden
Charles Parker Co Meriden

Nuts, Bolts and Washers
Clark Brothers Bolt Co Milldale

Office Equipment
Pitney-Bowes Inc Stamford
Underwood Corporation Bridgeport & Hartford

Offset Printing
Kellogg & Bulkeley A Division of Connecticut Printers Inc Hartford

Oil Burners
Miller Company The (domestic) Meriden
Peabody Engineering Corp (Mechanical and/or Steam Atomizer) Stamford
Silent Glow Oil Burner Corp The 1477 Park St Hartford

Oil Tanks
Norwalk Tank Co The (550 to 30M gals, underwriters above and under ground) South Norwalk
Whitlock Manufacturing Co The Hartford

Oils—Cutting
Anderson Oil Co Inc F E Portland

Open Knife Switches and Accessories
Trumbull Components Department, General Electric Co Plainville

Optical Cores & Ingots
Plume & Atwood Mfg Co The Thomaston

Otis Woven Awning Stripes
The Falls Company Norwich

Outlets—Electric
General Electric Company Bridgeport

Ovens—Electric
Bauer & Company Inc Hartford

Package Sealers
Better Packages Inc Shelton

Packaging Machinery
Colt's Manufacturing Company (box making machinery. Trade mark "Rite Size") Hartford

Packing
Auburn Manufacturing Company The (leather, rubber, asbestos, fibre) Middletown
Raybestos Division of Raybestos-Manhattan Inc (Asbestos and Rubber Sheet) Bridgeport

Pads—Office
The Baker Goodyear Company New Haven

Padlocks
Sargent & Company New Haven
Waterbury Lock & Specialty Co The Milford
Yale & Towne Mfg Co Inc Stamford

Paints and Enamels
Staminate Corp The New Haven

Panta
Moore Special Tool Co (crush wheel dresser) Bridgeport

Panelboards—Lighting and Distribution
Distribution Assemblies Department, General Electric Co Plainville

Paperboard
Gair Company Inc Robert Montville
Robertson Paper Box Co Montville
New Haven Pulp and Board Co The New Haven

Paper Boxes
Atlantic Carton Corp (folding) Norwich
Gair Co Inc Robert (folding) Montville
National Folding Box Co Inc (folding) New Haven
New Haven Board and Carton Co The New Haven
Mills Inc H J Bristol
Robertson Paper Box Co (folding) Montville

Paper Boxes—Folding and Setup
Bridgeport Paper Box Company Bridgeport
M Backes' Sons Inc Wallingford

Paper Clips
H C Cook Co The (steel) 32 Beaver St Ansonia

Paper Mill Machinery
Farrel-Birmingham Company Inc Ansonia

Paper Tags and Pin Tickets
Waterbury Buckle Co Waterbury

Paper Tubes and Cores
Sonoco Products Co (Climax-Lowell) Div Mystic

Parallel Tubes
Sonoco Products Co (Climax-Lowell) Div Mystic

Parkerizing
Clairglow Mfg Company Portland

Parking Meters
Rhodes Inc M H Hartford

Passenger Car Sander
Conn Telephone & Electric Corp Subsidiary of Great American Industries Inc Meriden

Pattern-Makers
Farrel-Birmingham Company Inc Ansonia

Penlights
Bridgeport Metal Goods Mfg Co Bridgeport

Pet Furnishings
Andrew B Hendrix Co The New Haven

Pharmaceutical Specialties
Ernst Bischoff Company Inc Ivoryton

Phosphor Bronze
American Brass Company The Waterbury
Miller Company The (sheets, strips, rolls) Meriden
Seymour Mfg Co The Seymour
Waterbury Rolling Mills Inc (sheets, strips, rolls) Waterbury
Western Brass Mills Division of Olin Industries Inc (sheet, strip) New Haven

Phosphor Bronze Ingots
Whipple and Choate Company The Bridgeport

Photographic Equipment
Kalart Company Inc Plainville

Piano Repairs
Pratt Read & Co Inc (keys and action) Ivoryton

Piano Supplies
Pratt Read & Co (keys and actions, backs, plates) Ivoryton

Pins
CEM Company ("Spirol") Danielson

Pin Up Lamps
Verplex Company The Essex

Pipe
American Brass Co The (brass and copper) Waterbury
Bridgeport Brass Co (brass and copper) Bridgeport
Chas Brass & Copper Co (red brass and copper) Waterbury
Howard Co (cement well and chimney) New Haven

Pipe Fitter's Hand Tools & Machines
Capewell Mfg Co The Hartford

Pipe Fittings
Corley Co Inc Plainville
Malleable Iron Fittings Co Branford

Pipe Plugs
Holo-Krome Screw Corporation The (countersunk) West Hartford

Pipe Plugs—Socketed
Holo-Krome Screw Corp The West Hartford

Plastics
B F Goodrich Sponge Products Division Shelton
Naugatuck Chemical Division United States Rubber Co Naugatuck

Plastic Buttons
Frank Parizek Manufacturing Co The West Willington
Patent Button Co The Waterbury

Plastic Gems
Colt's Manufacturing Company Hartford

Plastic Materials
American Cyanamid Co (Molding Compounds, Adhesives, Laminating Resins) Wallingford

Plastic Printing Plates
Lockwood Sons Inc Wm H Hartford

Plastics Machinery
Black Rock Mfg Company The Bridgeport
Farrel-Birmingham Company Inc Ansonia

Plastic Molders
Plastic Molding Corporation Sandy Hook

Plastic Molding
Butterfield, Inc T F Naugatuck
U S Plastic Molding Corporation Wallingford

Plastic—Moulders
Colt's Manufacturing Company Hartford
Conn Plastics Waterbury
General Electric Company Meriden
Waterbury Companies Inc Waterbury
Watertown Mfg Co The Watertown

Plastics—Moulds & Dies
Parker Stamp Works Inc The (for plastics) Hartford

Plasticrete Bloc
Plasticrete Corp Hamden

Plates—Switch
General Electric Company Bridgeport

Platers
American Metal Products Company Inc Bridgeport
Christie Plating Co Groton
City Plating Works Bridgeport
Patent Button Co The Waterbury
Waterbury Plating Company Waterbury
Chromium Process Company The (Chromium Plating only) Derby

Platers' Equipment
Apothecaries Hall Company Waterbury
Conn Metalcraft Inc New Haven
Lea Manufacturing Co The Waterbury
MacDermid Incorporated Waterbury

Platers Metal
Plume & Atwood Mfg Co The Thomaston

Plating
Christie Plating Co The (including lead plating) Groton
Conn Metal Finishing Co Hamden

Plating Processes and Supplies
Enthone Inc New Haven
United Chromium Incorporated Waterbury

Plumbers' Brass Goods
Bridgeport Brass Co Bridgeport
Keeney Mfg Co The (special bends) Newington
Scovill Manufacturing Company Waterbury 48

Plumbing Specialties
John M Russell Mfg Co Inc Naugatuck

Pole Line Hardware
Malleable Iron Fittings Co Branford

Police Equipment
The Smith-Worthington Saddlery Co Hartford

Polishing Wheels
Williamsville Buff Div The Bullard Clark Company Danielson

Poly Chokes
Poly Choke Company The (a shotgun choking device) Tariffville

Postage Meters
Pitney Bowes Inc Stamford

Potentiometers—Electronic
Bristol Company The Waterbury

Power Rollers
Consolidated Industries Inc West Cheshire

Prefabricated Buildings
City Lumber of Bridgeport Inc The Bridgeport

Premium Specialties
Waterbury Companies Inc Waterbury

Preservatives—Wood, Rope, Fabric
Darworth Incorporated ("Cuprinol") ("Cellu-san") Simsbury

Press Papers
Case Brothers Inc Manchester

Presses
Farrel-Birmingham Company Inc (Hydraulic Ansonia

Presses—Molding
Standard Machinery Co The (compression and transfer molding, automatic and semi-automatic) Mystic

Presses—Power
Waterbury Farrel Foundry & Machine Co The Waterbury

Pressure Vessels
Norwalk Tank Co Inc The (unfired to ASME Code Par U 69-70) South Norwalk
Whitlock Manufacturing Co The Hartford

Printing
Case Lockwood & Brainard A Division of Connecticut Printers Inc Hartford
Finlay Brothers Hartford
Heminway Corporation The Waterbury
Hildreth Press Bristol
Hunter Press Hartford
Lehman Brothers Inc New Haven
Taylor & Greenough Co The Wethersfield
T B Simonds Inc Hartford
A D Steinbach & Sons New Haven
The Walker-Rackliff Company New Haven

Printing Machinery
Banthin Engineering Co (automatic) Bridgeport
Thomas W Hall Company Stamford

Printing Plates
Lockwood Sons Inc Wm H Hartford

Printing Rollers
Chambers-Storck Company Inc The (engraved) Norwich

Production Control Equipment
Ripley Company Inc Middletown

Production Welding
Consolidated Industries West Cheshire

Profilers
Pratt & Whitney Div Niles-Bement-Pond Co West Hartford

Propellers—Aircraft
Hamilton Standard Div United Aircraft Corp (propellors and other aircraft equipment) Windsor Locks

Protective Coatings
Harrison Company The A S (Waxes) South Norwalk

Publishers
O'Toole & Sons Inc T Stamford

Pumps
Yale & Towne Mfg Co The Stamford

Pumps—Small Industrial
Eastern Industries Inc New Haven

Pump Valves
Colt's Manufacturing Company Hartford

Punches
Hoggson & Pettis Mfg Co The (ticket & cloth) 141 Brewery St New Haven

Putty Softeners—Electrical
Fletcher Terry Co The Box 415 Forestville

Pyrometers
Bristol Co The (recording and controlling) Waterbury

Radiation—Finned Copper
Bush Manufacturing Co West Hartford
G & O Manufacturing Company The New Haven
Vulcan Radiator Co The (steel and copper) Hartford

Radiators—Engine Cooling
G & O Manufacturing Co New Haven

Rayon Staple Fiber
Hartford Rayon Corp The Rocky Hill

Reamers
Pratt & Whitney Div Niles-Bement-Pond Co (All types) West Hartford

Recorders
Bristol Co The (automatic controllers, temperature, pressure, flow, humidity) Waterbury

Reduction Gears
Farrel-Birmingham Company Inc Ansonia
Snow-Nabstedt Gear Corp The New Haven

Refractories
Howard Company New Haven
Mullite Refractories Company The Shelton

Refrigeration
Bowser Technical Refrigeration Div Bowser Inc (high altitude, low temperature) Terryville

Regulators
Norwalk Valve Company (for gas and air) South Norwalk
Sorensen & Company Inc Stamford

Remote Control Wiring
General Electric Company Bridgeport

Resistance Wire
C O Jeliff Mfg Co The (nickel chromium, copper nickel, iron chromium, aluminum) Southport
Kanthal Corporation The Stamford

Respirators
American Optical Company Safety Products Division Putnam

Retainers
Hartford Steel Ball Co The (bicycle & automotive) Hartford

Riveting Machines
Grant Mfg & Machine Co The Bridgeport
Ripley Company Inc Middletown
H P Townsend Manufacturing Co The Elmwood

Rivets
Blake & Johnson Co The (brass, copper and non-ferrous) Waterville
Clark Brothers Bolt Co Milldale
Plume & Atwood Mfg Co The Waterbury
Raybestos Div of Raybestos-Manhattan Inc The (brass and aluminum tubular and solid copper) Bridgeport
Raybestos Div of Raybestos-Manhattan Inc The (iron) Bridgeport

Rods
American Brass Company The (copper, brass, bronze) Waterbury
Bristol Brass Corp The (brass and bronze) Bristol
Scovill Manufacturing Company (brass and bronze) Waterbury 91

Rollers—Bituminous Paving
Gabb Special Products Div E Horton & Son Company Windsor Locks

Roller Skate Wheels
Raybestos Division of Raybestos-Manhattan Inc Bridgeport

Roller Skates
Winchester Repeating Arms Company Division Olin Industries Inc New Haven

Rolling Mills and Equipment
Farrel-Birmingham Company Inc Ansonia
Fenn Mfg Co The Newington
Waterbury Farrel Foundry & Machine Co The Waterbury

Rolls
Farrel-Birmingham Company Inc (Chilled and Alloy Iron, Steel) Ansonia

Rope Wire
American Steel & Wire Div of U S Steel New Haven

Rubber Chemicals
Naugatuck Chemical Division United States Rubber Co Naugatuck
Stamford Rubber Supply Co The (Vulcanized Vegetable Oils) ("Factice") Stamford

Rubber—Cellular
B F Goodrich Sponge Products Division Shelton

Rubber Cutting Machinery
Black Rock Mfg Company The Bridgeport

Rubber Printing Plates
Lockwood Sons Inc Wm H Hartford

Rubberized Fabrics
Duro-Gloss Rubber Co The New Haven

Rubber Footwear
Goodyear Rubber Co The Middletown

Rubber Gloves
Seamless Rubber Company The New Haven

Rubber—Handmade Specialties
Seamless Rubber Company The New Haven

Rubber—Latex Foam
B F Goodrich Sponge Products Division Shelton

Rubber Latex Compounds and Dispersions
Naugatuck Chemical Division United States Rubber Co (coating, impregnating and adhesive compounds) Naugatuck

Rubber Mill Machinery
Farrel-Birmingham Company Inc Ansonia

Rubber—Molded Specialties
Canfield Co The H O Bridgeport
Seamless Rubber Company The New Haven

Rubber Products—Mechanical
Auburn Manufacturing Company The (washers, gaskets, molded parts) Middletown
Canfield Co The H O Bridgeport
Seamless Rubber Company The New Haven

Rubber—Reclaimed
Naugatuck Chemical Division United States Rubber Co Naugatuck

Rubbers
Naugatuck Chemical Div U S Rubber Co (special synthetic) Naugatuck

Rubbish Burners
John P Smith Co The 423-33 Chapel St New Haven

Rust Preventives
Anderson Oil Co Inc F E Portland

Saddlery
The Smith-Worthington Saddlery Co Hartford

Safety Clothing
American Optical Company Safety Products Division Putnam

Safety Fuses
Ensign-Bickford Co The (mining & detonating) Simsbury

Safety Gloves and Mittens
American Optical Company Safety Products Division Putnam

Safety Goggles
American Optical Company Safety Products Division Putnam

Safety Switches
Trumbull Components Department, General Electric Co Plainville

Saw Blades—Hack
Capewell Mfg Co The Hartford

Saws—Metal & Wood Cutting Band
Capewell Mfg Co The Hartford

Saws, Band, Metal Cutting
Atlantic Saw Mfg Co New Haven

Scales—Industrial Dial
Kron Company The Bridgeport

Scissors
Acme Shear Company The Bridgeport

Screens
Hartford Wire Works Co The (Windows, Doors and Porches) Hartford

Screw Caps
Weimann Bros Mfg Co The (small for bottles) Derby

Screw Machine Accessories
Barnaby Manufacturing and Tool Co Bridgeport

Screw Machines
H P Townsend Mfg Company The Elmwood

Screw Machine Products
Apex Tool Co Inc The Bridgeport
Blake & Johnson Co The Waterville
Consolidated Industries West Cheshire
Eastern Machine Screw Corp The Truman & Barclay Sts New Haven
Fairchild Screw Products Inc Winsted
Franklin Screw Machine Co The (up to 1½" capacity) Hartford
Greist Mfg Co The (Up to 1½" capacity) New Haven
Horberg Grinding Industries Inc (Heat treated and ground type only) 19 Staples Street Bridgeport
Humason Mfg Co The Forestville
Kerrin Company West Haven
Lowe Mfg Co The Wethersfield
National Automatic Products Company The Berlin
Nelson's Screw Machine Products Plantsville
New Britain Machine Company The New Britain
Olson Brothers Company (up to ¾" capacity) Plainville
Olson & Sons R P Southington
Peck Spring Co The Plainville
Plume & Atwood Mfg Co The Waterbury
Scovill Manufacturing Company Waterbury 91
Waterbury Machine Tools & Products Co (Brown & Sharpe and Davenport) Waterbury

Screw Machine Tools
American Cam Company Inc (Circular Form Tools Hartford
Pratt & Whitney Div Niles-Bement-Pond Co (Reamers, Taps, Dies, Blades and Knurls) West Hartford
Somma Tool Co (precision circular form tools) Waterbury

Screws
American Screw Company Willimantic
Atlantic Screw Works (wood) Hartford
Blake & Johnson Co The (machine and wood) Waterville
Bristol Company The (socket set and socket cap screws) Waterbury
Clark Brothers Bolt Co Milldale
Eagle Lock Co The Terryville
Holo-Krome Screw Corporation The (socket set and socket cap) West Hartford
Scovill Manufacturing Company Waterbury 91
Superior Manufacturing Co The Winsted

Screw—Sockets
Allen Manufacturing Company The Hartford
Bristol Co The Waterbury
Holo-Krome Screw Corp The West Hartford

Sealing Tape Machines
Better Packages Inc Shelton

Service Entrance Equipment
Trumbull Components Department, General Electric Co Plainville

Sewing Machines
Greist Mfg Co The (Sewing Machine attachments) 503 Blake St New Haven
Merrow Machine Co The (Industrial) Hartford
Singer Manufacturing Company The (industrial) Bridgeport

Shaving Soaps
J B Williams Co The Glastonbury

Shears
Acme Shear Co The (household) Bridgeport

Shells
Wolcott Tool and Manufacturing Company Inc Waterbury

Sheet Metal Products
American Brass Co The (brass and copper) Waterbury
Merriam Mfg Co (security boxes, fitted tool boxes, tackle boxes, displays) Durham
Charles Parker Co (sheet metal fabricators) Meriden
Plume & Atwood Mfg Co The Waterbury
United Manufacturing Co Division of The W L Maxson Corp Hamden

Sheet Metal Stampings
American Brass Company The Waterbury
American Buckle Co The West Haven
DooVal Tool & Mfg Inc The Naugatuck
J H Sessions & Son Bristol
Patent Button Co The Waterbury
Plume & Atwood Mfg Co The Waterbury

Shipment Sealers
Better Packages Inc Shelton

Showcase Lighting Equipment
Wiremold Company The Hartford

Signals
H C Cook Co The (for card files) 32 Beaver St Ansonia

Signs
Berger Sign Co (neon electric-porcelain enamel-stainless steel) Hartford

Silk Screening on Metal
Merriam Mfg Co (Displays and Specialties, to order) Durham

Sintered Metal Products
Raybestos Division of Raybestos-Manhattan Inc Bridgeport

Sizing and Finishing Compounds
American Cyanamid Company Waterbury

Slide Fasteners
G E Prentice Mfg Co The Kensington
North & Judd Manufacturing Co New Britain
Patent Button Co The Waterbury

Slings
American Steel & Wire Div of U. S. Steel New Haven

Smoke Stacks
Bigelow Company The (steel) New Haven
Norwalk Tank Co The South Norwalk

Soap
J B Williams Co The (industrial soaps, toilet soaps, shaving soaps) Glastonbury

Special Machinery
Black Rock Mfg Company The Bridgeport
Farrel-Birmingham Company Inc Ansonia
Fenn Mfg Co The Newington
H P Townsend Mfg Company The Elmwood
Lundeberg Engineering Company Hartford
National Sheradizing & Machine Co (mandrels & stock shells for rubber industry) Hartford
Swan Tool & Machine Co The Hartford

Special Parts
Fenn Mfg Co The Newington
Greist Mfg Co The (small machines, especially precision stampings) New Haven
J H Sessions & Son Bristol

Special Tool & Dies
Lundeberg Engineering Company Hartford

Spinnnings
American Metal Products Company Inc Bridgeport
Gray Manufacturing Company The Hartford

Spline Milling Machines
Townsend Mfg Co The H P Elmwood

Sponge Rubber
B F Goodrich Sponge Products Division Shelton

Spray Painting Equipment and Supplies
Lea Manufacturing Co The Waterbury

Spring Coiling Machines
Torrington Manufacturing Co The Torrington

Spring Presses
Townsend Mfg Co The H P Elmwood

Spring Units
Owen Silent Spring Division American Chain & Cable Company Inc Bridgeport
(Advt.)

Spring Washers
Barnes Co The Wallace Div Associated Spring Corp Bristol

Springs—Coil & Flat
Barnes Co The Wallace Div Associated Spring Corp Bristol
Bristol Spring Manufacturing Co Plainville
Foursome Manufacturing Co Bristol
Humason Mfg Co The Forestville
Newcomb Spring Corp The Southington
New England Spring Manufacturing Company Unionville
Peck Spring Co The Plainville

Springs—Flat
Barnes Co The Wallace Div Associated Spring Corp Bristol
Bristol Spring Manufacturing Co Plainville
Foursome Manufacturing Co Bristol
Humason Mfg Co The Forestville

Springs—Furniture
Owen Silent Spring Division American Chain & Cable Company Inc Bridgeport

Springs—Wire
Barnes Co The Wallace Div Associated Spring Corp Bristol
Bristol Spring Manufacturing Co Plainville
Colonial Spring Corporation The Hartford
Connecticut Spring Corporation The (compression, extension, torsion) Hartford
Foursome Manufacturing Co Bristol
Humason Mfg Co The Forestville
D R Templeman Co (coil and torsion) Plainville
J W Bernston Company (coil and torsion) Plainville
Newcomb Spring Corp The Southington

Springs, Wire & Flat
Autoyre Company The Oakville

Stamped Metal Products
American Brass Company The Waterbury

Stamps
Hoggson & Pettis Mfg Co The (steel) 141 Brewery St New Haven
Parker Stamp Works Inc The (steel) Hartford

Stampings
American Metal Products Company Inc Bridgeport
Donahue Mfg Co Inc Watertown
DooVal Tool & Mfg Inc The Naugatuck
Foursome Manufacturing Co Bristol
Plume & Atwood Mfg Co The (small) Waterbury
Stanley Pressed Metal New Britain

Stampings—Small
Acme Shear Co The Bridgeport
American Metal Products Company Inc Bridgeport
Barnes Co The Wallace Div Associated Spring Corp Bristol
Bristol Spring Manufacturing Co Plainville
Greist Manufacturing Co The New Haven
Humason Mfg Co The Forestville

Stationery Specialties
American Brass Company The Waterbury

Steel
Stanley Works The (cold rolled strip) New Britain

Steel Castings
Farrel-Birmingham Company Inc Ansonia
Hartford Electric Steel Co The (carbon and alloy steel) 540 Flatbush Ave Hartford
Malleable Iron Fittings Co Branford
Nutmeg Crucible Steel Co Branford

Steel—Cold Rolled Spring
Barnes Co The Wallace Div Associated Spring Corp Bristol

Steel—Cold Rolled Stainless
Wallingford Steel Company Wallingford

Steel—Cold Rolled Strip and Sheets
American Steel & Wire Div of U S Steel New Haven
Detroit Steel Corporation New Haven
Wallingford Steel Company Wallingford

Steel Goods
Merriam Mfg Co (sheets products to order) Durham

Steel Rolling Rules
Waterbury Lock & Specialty Co The Milford

Steel Strapping
Stanley Works The New Britain

Stereotypes
New Haven Electrotype Div Electrographic Corp New Haven

Stop Clocks, Electric
H C Thompson Clock Co The Bristol

Storage Batteries
R A E Storage Battery Mfg Co Glastonbury

Straps, Leather
Auburn Manufacturing Company The (textile, industrial, skate, carriage) Middletown

Studio Couches
Waterbury Mattress Co Waterbury

Super Refractories
Mullite Refractories Company The Shelton

Surface Metal Raceway & Fittings
Wiremold Company The Hartford

Surgical Dressings
Acme Cotton Products Co Inc East Killingly
Seamless Rubber Company The New Haven

Surgical Rubber Goods
Seamless Rubber Company The New Haven

Switches—Electric
General Electric Company Bridgeport

Swaging Machinery
Fenn Mfg Co The Newington
Hartford Special Machinery Co The Hartford

Switchboards
Distribution Assemblies Department, General Electric Co Plainville

Switchboards Wire and Cables
Rockbestos Products Corp (asbestos insulated) New Haven

Synchronous Motors
R W Cramer Company Inc The Centerbrook

Synthetic Resins
American Cyanamid Co (Textile Resins, Paper Resins) Waterbury

Tabulating Equipment—Manual
Denominator Company Inc Woodbury

Tags
Waterbury Buckle Co (Paper and Cloth) Waterbury

Tanks
Bigelow Company The (steel) New Haven
Norwalk Tank Co The South Norwalk
Rolock Inc (Alloy) Fairfield
Storts Welding Company (steel and alloy) Meriden

Tape
Russell Manufacturing Company The (woven cotton and woven glass tape) Middletown

Tapes—Industrial Pressure Sensitive
Seamless Rubber Company The New Haven

Tape Recorders
Conn Telephone & Electric Corp Subsidiary of Great American Industries Inc Meriden

Tape Recorder Magazines
Conn Telephone & Electric Corp Subsidiary of Great American Industries Inc Meriden

Tap Extractors
Walton Company The West Hartford

Taps
Pratt & Whitney Div Niles-Bement-Pond Co West Hartford

Tarred Lines
Brownell & Co Inc Moodus

Telemetering Instruments
Bristol Co The Waterbury

Telephone Answering & Recording Machines
Conn Telephone & Electric Corp Subsidiary of Great American Industries Inc Meriden

Testers—Insulation Wire & Cable
Davis Electric Company Wallingford

Testers—Non-Destructive
Sperry Products Inc Danbury

Textile Machinery
Merrow Machine Co The 2814 Laurel St Hartford

Textile Mill Supplies
Ernst Bischoff Company Inc Ivoryton

Textile Processors
American Dyeing Corporation (rayon, acetate, nylon, dacron, other synthetics) Rockville

Thermometers
Bristol Co The (recording and automatic control) Waterbury
Manning Maxwell & Moore Inc Stratford

Thermostats
Bridgeport Thermostat Company Inc (automatic) Bridgeport

Thin Gauge Metals
Plume & Atwood Mfg Co The Thomaston
Thinsheet Metals Co The (plain or tinned in rolls) Waterbury

Thread
American Thread Co The Willimantic
Belding Heminway Corticelli Putnam
Max Pollack & Co Inc Groton and Willimantic
Wm Johl Manufacturing Co Mystic

Thread Gages
Pratt & Whitney Div Niles-Bement-Pond Co West Hartford

Thread Milling Machines
Pratt & Whitney Div Niles-Bement-Pond Co West Hartford

Thread Rolling Machinery
Hartford Special Machinery Co The Hartford

Threading Machines
Grant Mfg & Machine Co The (double and automatic) Bridgeport

Timers, Interval
A W Haydon Co The Waterbury
H C Thompson Clock Co The Bristol
R W Cramer Company Inc The Centerbrook
Rhodes Inc M H Hartford

Timing Devices
A W Haydon Co The Waterbury
R W Cramer Company Inc The Centerbrook
Lux Clock Manufacturing Company Waterbury
Rhodes Inc M H Hartford
Seth Thomas Clocks Thomaston
United States Time Corporation The Waterbury

Timing Devices & Time Switches
A W Haydon Co The Waterbury
Lux Clock Manufacturing Company Waterbury
M H Rhodes Inc Hartford

Tinning
Thinsheet Metals Co The (non-ferrous metals in rolls) Waterbury
Wilcox Crittenden & Co Inc Middletown

Tools
Billings & Spencer Company (wrenches, sockets and shop tools) Hartford
Hoggson & Pettis Mfg Co The (rubber workers) 141 Brewery St New Haven

Tool Chests
Vanderman Manufacturing Co The Willimantic

Tool & Dies
Moore Special Tool Co Bridgeport
Swan Tool & Machine Co The Hartford

Tools, Dies & Fixtures
Greist Mfg Co The New Haven

Tools—Pipe Fitters' Hand
Capewell Mfg Co The Hartford

Toys
Geo S Scott Mfg Co The Wallingford
Gong Bell Co The East Hampton
N N Hill Brass Co The East Hampton
Waterbury Companies Inc Waterbury

Tramways
American Steel & Wire Div of U S Steel New Haven

Transformers
Berkshire Transformer Corp The New Milford
Dano Electric Company Winsted

Trucks—Commercial
Metropolitan Body Company (International Harvester truck chassis and "Metro" bodies) Bridgeport

Trucks—Industrial
George P Clark Co Windsor Locks

Trucks—Lift
Excelsior Hardware Co The Stamford
George P Clark Co Windsor Locks

Trucks—Skid Platforms
Excelsior Hardware Co The (lift) Stamford

Tube Bending
Donahue Mfg Co Inc Watertown

Tube Clips
H C Cook Co The (for collapsible tubes) 32 Beaver St Ansonia
Weimann Bros Mfg Co The (for collapsible tubes) Derby

Tube Fittings
Scovill Mfg Co ("Uniflare") Waterbury

Tubers
Standard Machinery Co The (tubers for both rubber and plastic industries) Mystic

Tubes—Collapsible Metal
Sheffield Tube Corp The — New London

Tubing
American Brass Co The (brass and copper) — Waterbury
Bridgeport Brass Company (brass and copper) — Bridgeport
G & O Manufacturing Co (finned) — New Haven
Scoville Manufacturing Company (Brass and Copper) — Waterbury 91

Tubing—Flexible Metallic
American Brass Co Metal Hose Branch — Waterbury

Tubing—Heat Exchanger
American Brass Company The — Waterbury
Scovill Manufcturing Company — Waterbury 91

Tumbling Equipment & Supplies
Tumbling Sales & Service Company — Greenwich

Tumbling Service
Tumbling Sales & Service Company, Esbec Tumbling Division — Meriden

Typewriters
Royal Typewriter Co Inc — Hartford
Underwood Corporation — Hartford

Typewriters—Portable
Royal Typewriter Company Inc — Hartford
Underwood Corporation — Hartford

Typewriter Ribbons and Supplies
Royal Typewriter Comany Inc — Hartford
Underwood Corporation — Hartford and Bridgeport

Underclearer Rolls
Sonoco Products Co (Climax-Lowell Div) — Mystic

Vacuum Bottles and Containers
American Thermos Bottle Co — Norwich

Vacuum Cleaners
Electrolux Corporation — Old Greenwich
Spencer Turbine Co The — Hartford

Valves
Norwalk Valve Company (sensitive check valves) — South Norwalk

Valve Discs
Colt's Manufacturing Company — Hartford

Valve—Automobile Tire
Bridgeport Brass Company — Bridgeport

Valves—Radiator Air
Bridgeport Brass Company — Bridgeport

Valves—Relief & Control
Beaton & Caldwell Mfg Co — New Britain

Valves—Safety & Relief
Manning Maxwell & Moore Inc — Stratford

Vanity Boxes
Bridgeport Metal Goods Mfg Co — Bridgeport
Plume & Atwood Manufacturing Co — Waterbury

Varnishes
Staminite Corp The — New Haven

Vegetable Peelers
Colt's Manufacturing Company — Hartford

Velvets
American Velvet Co (owned and operated by A Wimpfheimer & Bro Inc) — Stonington
Leiss Velvet Mfg Co Inc The — Wilimantic
Velvet Textile Corporation The (Velveteen) — West Haven

Venetian Blinds
Findell Manufacturing Company — Manchester
Jennings Company The S Barry — New Haven
New England Shade & Blind Co Inc — Durham

Venetian Blind Tape
Russell Manufacturing Company The (woven cotton and woven plastic) — Middletown

Ventilating Systems
Colonial Blower Company — Plainville

Vertical Shapers
Pratt & Whitney Div Niles-Bement-Pond Co — West Hartford

Vibrators—Pneumatic
Branford Co The (industrial) — New Haven

Vises
Charles Parker Co The — Meriden
Penn Manufacturing Company The (Quick-Action Vises) — Newington
Vanderman Manufacturing Co The (Combination Bench Pipe) — Willimantic

Washers
American Felt Co (felt) — Glenville
Auburn Manufacturing Company The (all materials) — Middletown
Blake & Johnson The (brass, copper & non-ferrous) — Waterville

Washers (Continued)
Clark Brothers Bolt Co — Milldale
Plume & Atwood Mfg Co The (brass & copper) — Waterbury
J H Rosenbeck Inc — Torrington
Saling Manufacturing Company (made to order) — Unionville

Washers—Felt
Chas W House & Sons Inc (Mills & Cutting Plant) — Unionville

Washing Machines—Electric
General Electric Company — Bridgeport

Watches
E Ingraham Co The — Bristol
United States Time Corporation The — Waterbury

Water Heaters
Whitlock Manufacturing Co The (instantaneous & storage) — Hartford

Water Heaters—Electric
Bauer & Company Inc — Hartford

Water Heaters—Gas or Kerosene
Holyoke Heater Corp of Conn Inc — Hartford

Waterproof Dressings for Leather
Viscol Company The — Stamford

Waxes
Harrison Company The A S (and other protective coatings) — South Norwalk

Waxes—Floor
Fuller Brush Co The — Hartford

Wedges
Saling Manufacturing Company (hammer & axe) — Unionville

Welding
Farrel-Birmingham Company Inc — Ansonia
G E Wheeler Company (Fabrication of Steel & Non-Ferrous Metals) — New Haven
Industrial Welding Company (Equipment Manufacturers—Steel Fabricators) — Hartford
Porupine Company The — Bridgeport

Welding—Lead
Storts Welding Company (tanks and frabrication) — Meriden

Welding Rods
American Brass Company The — Waterbury
Bristol Brass Co The (brass & bronze) — Bristol

Wheels—Industrial
George P Clark Co — Windsor Locks

Wicks
Auburn Manufacturing Company The (felt, asbestos) — Middletown
Holyoke Heater Corp of Conn Inc — Hartford

Window & Door Guards
Hartford Wire Works Co The — Hartford
Smith Co The John P — New Haven

Window Shades
New England Shade & Blind Co Inc — Durham

Wiping Cloths
Federal Textile Corporation — New Haven

Wire
American Brass Company The — Waterbury
American Steel & Wire Div of U S Steel — New Haven
Atlantic Wire Co The (steel) — Branford
Bartlett Hair Spring Wire Co The (hair spring) — North Haven
Bridgeport Brass Company (brass and silicon bronze) — Bridgeport
Bristol Brass Corp The (brass & bronze) — Bristol
Driscoll Wire Co The (steel) — Shelton
Hudson Wire Co Winsted Div (insulated & enameled magnet) — Winsted
Platt Bros & Co The (zinc wire) P O Box 1030 — Waterbury
Plume & Atwood Mfg Co The (brass, bronze, nickel silver) — Thomaston
Scovill Manufacturing Company (Brass, Bronze and Nickel Silver) — Waterbury 91

Wire and Cable
General Electric Company (for residential, commercial and industrial applications) — Bridgeport

Wire Arches & Trellises
Hartford Wire Works Co The — Hartford
John P Smith Co The 423-33 Chapel St — New Haven

Wire Baskets
Wiretex Mfg Co Inc (Industrial, for acid, heat, treating and degreasing) — Bridgeport

Wire Cable
Bevin-Wilcox Line Co The (braided) — East Hampton

Wire Cloth
Hartford Wire Works Co The — Hartford
C O Jeliff Mfg Co The (all metal, all meshes) — Southport
Pequot Wire Cloth Co Inc — Norwalk
Rolock Inc (Alloy) — Fairfield
Smith Co The John P — New Haven

Wire Drawing Dies
Waterbury Wire Die Co The — Waterbury

Wire Diping Baskets
Hartford Wire Works Co The — Hartford
John P Smith Co The 423-33 Chapel St — New Haven

Wire Formings
Autoyre Co The — Oakville
G E Prentice Mfg Co The — Kensington
Master Engineering Company — West Cheshire
North & Judd Manufacturing Co — New Britain
Turner & Seymour Manufacturing Co The — Torrington
Verplex Company The — Essex

Wire Forms
Barnes Co The Wallace Div Associated Spring Corp — Bristol
Bristol Spring Manufacturing Co — Plainville
Colonial Spring Corporation The — Hartford
Connecticut Spring Corporation The — Hartford
Foursome Manufacturing Co — Bristol
Humason Mfg Co The — Forestville
New England Spring Mfg Co — Unionville
Templeman Co D R — Plainville

Wire Goods
American Buckle Co The (overall trimmings) — West Haven
Patent Button Co The — Waterbury
Scovill Manufacturing Company (To Order) — Waterbury 91

Wire Partitions
Hartford Wire Works Co The — Hartford
John P Smith Co The 423-33 Chapel St — New Haven

Wire Products
Clairglow Mfg Company — Portland
Humason Mfg Co The — Forestville
Plume & Atwood Mfg Co The (to order) — Waterbury

Wire Reels
A H Nilson Mach Co The — Bridgeport

Wire Rings
American Buckle Co The (pan handles and tinners' trimmings) — West Haven
Humason Mfg Co The — Forestville
Templeman Co D R — Plainville

Wire Rope and Strand
American Steel & Wire Div of U S Steel — New Haven

Wire Shapes
Bridgeport Chain & Mfg Co — Bridgeport

Wire—Specialties
Andrew B Hendryx Co The — New Haven

Wire and Cable
Rockbestos Products Corporation (all asbestos, mining, shipboard and appliance applications) — New Haven

Wooden Boxes
Wallingford Planing Mill Co Inc — Yalesville

Wood Handles
Salisbury Cutlery Handle Co The (for cutlery & small tools) — Salisbury

Wood Scrapers
Fletcher-Terry Co The — Forestville

Woodwork
C H Dresser & Sons Inc (Mfg all kinds of woodwork) — Hartford
Hartford Builders Finish Co — Hartford

Woven Felts—Wool
Chas W House & Sons Inc (Mills & Cutting Plant) — Unionville

Yarns
Hartford Spinning Incorporated (Woolen, knitting and weaving yarns) — Unionville
Aldon Spinning Mills Corporation The (fine-woolen and specialty) — Talcottville
Ensign-Bickford Co The (jute-carpet) — Simsbury

Zinc
Platt Bros & Co The (ribbon, strip and wire) P O Box 1030 — Waterbury

Zinc Castings
Newton-New Haven Co Inc — 688 Third Ave West Haven

The Curse of Subsidies Some Remedies

(Continued from page 20)

house you may expect to move. And so all dependents on government power, loans, health, houses, fruits of fields and forest must do the will of government and not of God. Government pretends to be a substitute for God. It is certain to be rejected.

Congress Needs Help of People

I dare say a majority of Congressmen are leaving Washington this August 1954 with a greater political, economic, and moral sense of frustration, than at any time in 22 years. It is because we have tried and failed to resolve questions of right and wrong on a constitutional basis in our domestic affairs. The contentions of groupism and the outright disorder and lawlessness of some of the more powerful groups have wearied our souls. What is worse, we have no defense against the demands of these groups in the future. Congress has found the constitutional limitations on its power to satisfy these groups gone and the floodgates wide open.

The people themselves must reassert those limitations on Congress and renounce for themselves the corruption offered for their votes. The people must determine for themselves the kind of government they want. Congress cannot do it for them. Mr. Speaker, I would like to know what the people think of Mr. Metcalf's proposal. And I would like to hear, as I am sure every Congressman would, how to get the Government out of all of its unconstitutional business.

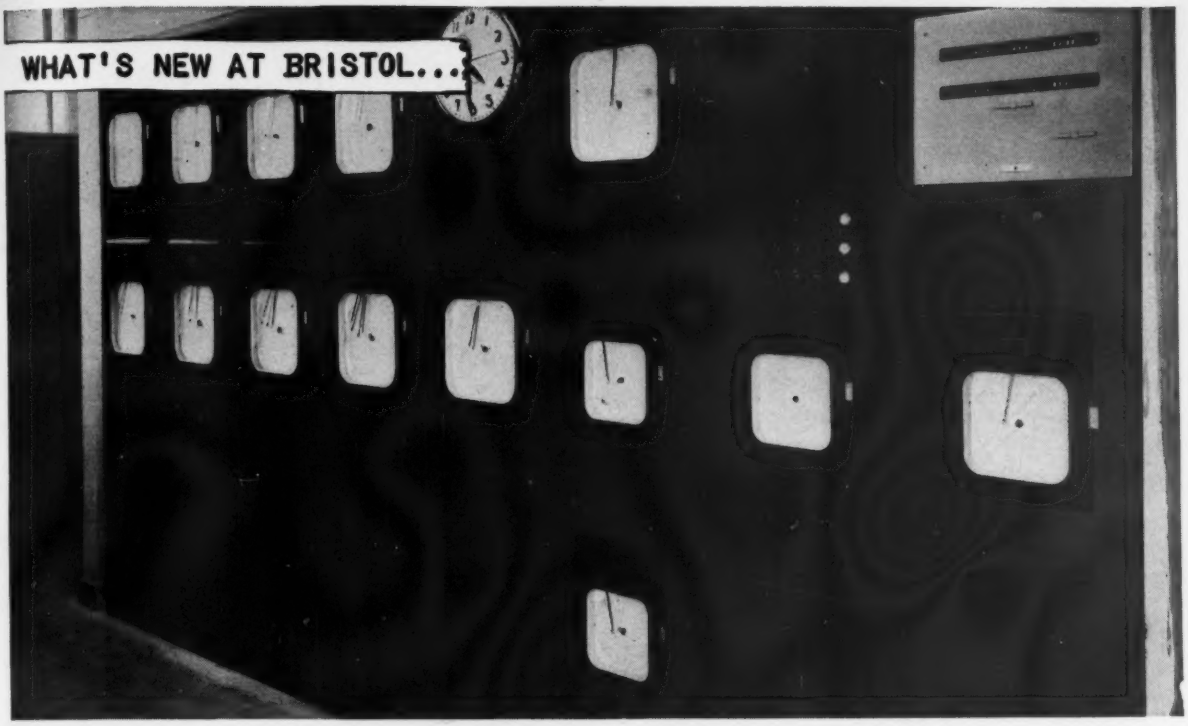
The Development of the American Cotton Textile Industry

(Continued from page 18)

merger movement just prior to these declines, it is worthwhile pondering the effects of the changes in market structure on the behavior of textile prices, output, and profits during periods of textile recession.

It will be noted in this brief sketch of the history of the textile industry that such important topics as the geographic location and relocation of the industry, the development of integration, changes in market structure and in competitive behavior, have been treated sparingly, if at all. This is because it was felt that it would be inappropriate to discuss these important topics in cursory fashion.

Advertising Index



IN SAN FRANCISCO. Control panel at the new Point Richmond Holder Station of the Pacific Gas and Electric Co. The Bristol Metameter Receivers on this panel record readings of flow and pressure at focal points of load in the natural gas distribution and transmission systems for San Francisco Bay section. This installation is part of an elaborate system of Metameter Telemetering and remote control, involving distances up to 50 miles, used on this company's far flung network of pipe lines throughout northern and central California. This company is using Metameters that have been in operation since 1935.

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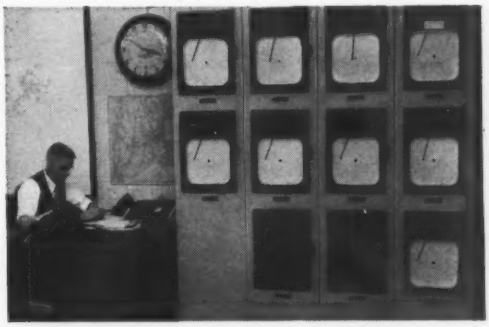

IN SPRINGFIELD, MASS. Dispatching Office of Northeastern Gas Transmission Co., in Springfield, Mass. Pressure readings from six New England points are received by the two Time-Multiplex Receivers shown on the bottom of the panel and individually recorded by the 9 Metameter Receivers. With the new Bristol Multiplexing equipment, up to 15 readings can be transmitted over a single circuit. Thus, tremendous savings are made in circuit costs.

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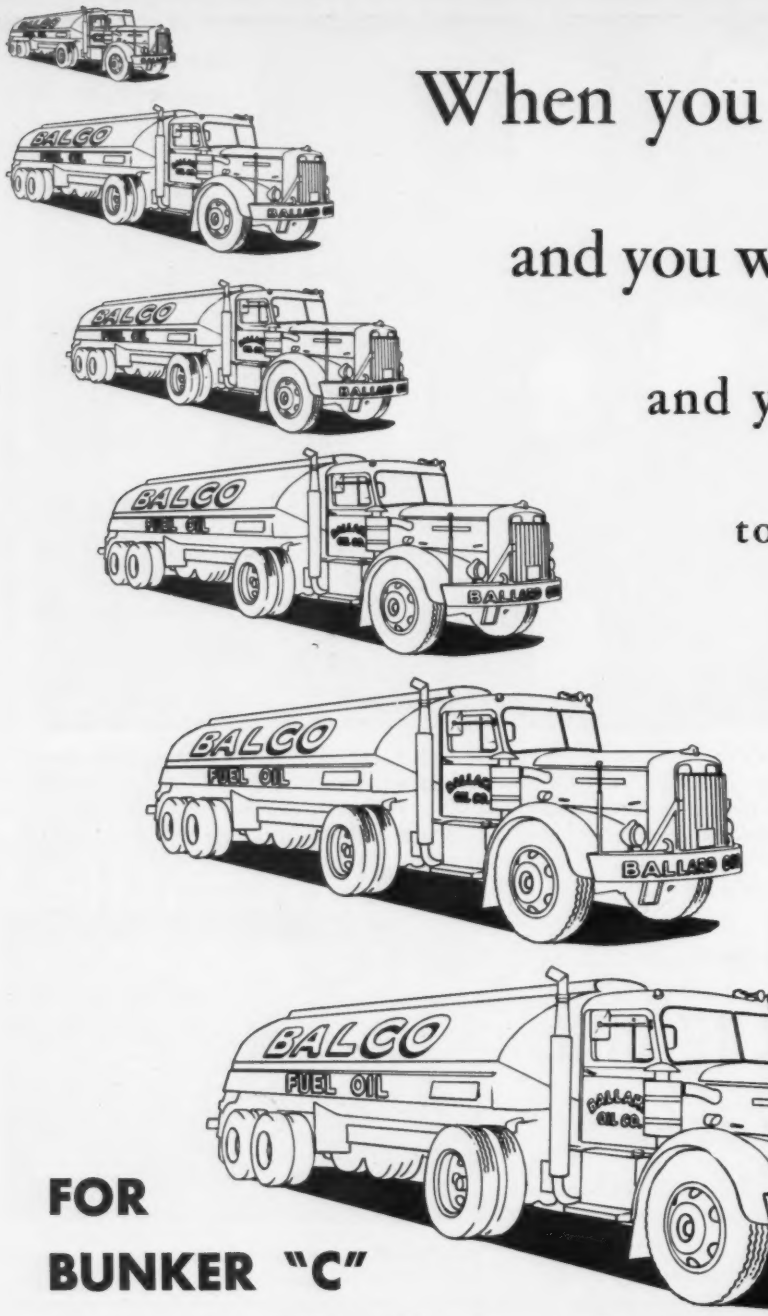

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